

# NACOmatic

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<b>DE Min Alt#3</b>	<b>-</b>	<b>5</b>
<b>DE Min TO#3</b>	<b>-</b>	<b>9</b>
<b>33N</b>	<b>-</b>	<b>40</b>
<b>DOV</b>	<b>-</b>	<b>24</b>
<b>EVY</b>	<b>-</b>	<b>51</b>
<b>GED</b>	<b>-</b>	<b>44</b>
<b>ILG</b>	<b>-</b>	<b>55</b>
<b>N06</b>	<b>-</b>	<b>49</b>

DE Mins - Alternates #3	-	5	
DE Mins - Take-Off #3	-	9	
DOVER-CHESWOLD . . . . .	33N	-	40
DOVER . . . . . . . . . . .	DOV	-	24
GEORGETOWN . . . . . . .	GED	-	44
LAUREL . . . . . . . . . . .	N06	-	49
MIDDLETOWN . . . . . . .	EVY	-	51
WILMINGTON . . . . . . .	ILG	-	55

## INSTRUMENT APPROACH PROCEDURE CHARTS

**A IFR ALTERNATE AIRPORT MINIMUMS**

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

**NAME** ALTERNATE MINIMUMS  
**ABINGDON, VA**  
 VIRGINIA HIGHLANDS ..... LOC Rwy 24  
     RNAV (GPS) Rwy 6  
     RNAV (GPS) Rwy 24  
     VOR/DME-B

NA when local weather not available.  
 Category C, 800-2½, Category D, 800-2½.

**ANNAPOLIS, MD**  
 LEE ..... RNAV (GPS)-A  
 NA when local weather not available.

**BALTIMORE, MD**  
 BALTIMORE-WASHINGTON INTL  
 THURGOOD MARSHALL ILS or LOC Rwy 15L<sup>1</sup>  
     ILS or LOC Rwy 28<sup>2</sup>  
     VOR Rwy 10<sup>3</sup>

<sup>1</sup>ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

<sup>2</sup>ILS, Categories A,B,C, 700-2; Category D 700-2½; LOC, Category D, 800-2¼.

<sup>3</sup>Categories A,B,1200-2; Category C,D 1200-3.

MARTIN STATE ..... LDA Rwy 33<sup>12</sup>  
     LOC Rwy 15<sup>1</sup>  
     VOR/DME or TACAN Z Rwy 15<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Categories A, B, 900-2; Category C, 900-2½; Category D 900-2¾.

**BLACKSBURG, VA**  
 VIRGINIA TECH/MONTGOMERY  
 EXECUTIVE ..... RNAV (GPS) Rwy 12  
     RNAV (GPS) Rwy 30  
 NA when local weather not available.

**NAME** ALTERNATE MINIMUMS  
**CHARLOTTESVILLE, VA**  
 CHARLOTTESVILLE-  
 ALCBEMARLE .. .... ILS or LOC Rwy 3<sup>12</sup>  
     RNAV (GPS) Rwy 3<sup>34</sup>  
     RNAV (GPS) Y Rwy 21<sup>35</sup>  
     RNAV (GPS) Z Rwy 21<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>ILS, Categories A, B, C, 800-2; Category D, 800-2½. LOC, Category D, 800-2½.

<sup>3</sup>NA when local weather not available.

<sup>4</sup>Category D, 1000-3.

<sup>5</sup>Category C, 800-2½; Category D, 1000-3.

**COLLEGE PARK, MD**  
 COLLEGE PARK ..... RNAV (GPS) Rwy 15  
 NA when local weather not available.

**CULPEPER, VA**  
 CULPEPER RGNL ..... LOC Rwy 4<sup>1</sup>  
     RNAV (GPS) Rwy 4<sup>2</sup>  
     RNAV (GPS) Rwy 22<sup>2</sup>  
     VOR-A<sup>2</sup>

<sup>1</sup>NA when FBO closed.

<sup>2</sup>NA when local weather not available.

**DANVILLE, VA**  
 DANVILLE RGNL ..... ILS or LOC Rwy 2  
     RNAV (GPS) Rwy 2  
     RNAV (GPS) Rwy 20  
     VOR Rwy 2  
     VOR Rwy 20<sup>1</sup>

NA when local weather not available.

<sup>1</sup>Categories A, B, 1000-2; Category C, 1000-2½; Category D, 1000-3.

**DUBLIN, VA**  
 NEW RIVER VALLEY ..... VOR or GPS-A  
 Category D, 800-2½.

NAME ALTERNATE MINIMUMS  
**EASTON, MD**  
 EASTON/  
 NEWNAM FIELD ..... ILS or LOC/DME Rwy 4<sup>1</sup>  
   RNAV (GPS) Rwy 4  
   RNAV (GPS) Rwy 15  
   RNAV (GPS) Rwy 22  
   RNAV (GPS) Rwy 33

NA when local weather not available.

<sup>1</sup>ILS,LOC, NA when control tower closed.

**EMPORIA, VA**  
 EMPORIA-  
 GREENSVILLE RGNL ..... RNAV (GPS) Rwy 15  
 NA when local weather not available.

**FARMVILLE, VA**  
 FARMVILLE RGNL ..... NDB Rwy 3<sup>1</sup>  
   RNAV (GPS) Rwy 3  
   RNAV (GPS) Rwy 21

NA when local weather not available.

<sup>1</sup>Categories A, B, 900-2; Category C, 900-2½.

**FELKER AAF (KFAF)**  
 FORT EUSTIS, VA..... ORIG 08297  
   NDB Rwy 14  
   COPTER NDB Rwy 14  
   RNAV (GPS) Rwy 14  
   COPTER RNAV (GPS) Rwy 14

NA when control tower closed.

**FORT MEADE (ODENTON), MD**  
 TIPTON ..... RNAV (GPS) Rwy 28  
 NA when local weather not available.

**FREDERICK, MD**  
 FREDERICK MUNI ..... RNAV (GPS) Rwy 5<sup>12</sup>  
   RNAV (GPS) Y Rwy 23<sup>1</sup>  
   RNAV (GPS) Z Rwy 23<sup>3</sup>

<sup>1</sup>Category D, 800-2½.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Categories A,B,C,D, 800-2½.

**GAITHERSBURG, MD**  
 MONTGOMERY COUNTY  
 AIRPARK ..... NDB Rwy 14  
 Categories A, B, 900-2; Category C, 900-2½;  
 Category D, 900-2¼.

**GALAX/HILLSVILLE, VA**  
 TWIN COUNTY ..... RNAV (GPS) Rwy 1  
   RNAV (GPS) Rwy 19  
 NA when local weather not available.

**GEORGETOWN, DE**  
 SUSSEX COUNTY ..... RNAV (GPS) Rwy 4  
   RNAV (GPS) Rwy 22  
 NA when local weather not available.

NAME ALTERNATE MINIMUMS  
**HAGERSTOWN, MD**  
 HAGERSTOWN RGNL-RICHARD A.  
 HENSON FIELD ..... ILS or LOC Rwy 9<sup>1</sup>  
   ILS or LOC Rwy 27<sup>1</sup>  
   RNAV (GPS) Rwy 9  
   RNAV (GPS) Rwy 27  
   VOR Rwy 9

NA when local weather not available.

<sup>1</sup>NA when control tower closed.

**HOT SPRINGS, VA**  
 INGALLS FIELD ..... RNAV (GPS) Rwy 7<sup>1</sup>  
   RNAV (GPS) Rwy 25<sup>2</sup>

NA when local weather not available.

<sup>1</sup>Categories A, B, 1000-2; Category C, 1000-2½, Category D, 1000-3.

<sup>2</sup>Category C, 800-2½; Category D, 800-2½.

**JONESVILLE, VA**  
 LEE COUNTY ..... RNAV (GPS) Rwy 25  
   RNAV (GPS) Rwy 19

NA when local weather not available.

Categories A, B, 1000-2; Category C, 1000-2½;  
 Category D, 1000-3.

**LEESBURG, VA**  
 LEESBURG EXECUTIVE ..... LOC Rwy 17<sup>1</sup>  
   RNAV (GPS) Rwy 17<sup>2</sup>

<sup>1</sup>Categories A, B, 900-2; Category C, 900-2½;  
 Category D, 900-2½.

<sup>2</sup>NA when local weather not available.

**LEONARDTOWN, MD**  
 ST. MARY'S COUNTY  
 RGNL ..... RNAV (GPS) Rwy 11  
   RNAV (GPS) Rwy 29

NA when local weather not available.

**LOUISA, VA**  
 LOUISA COUNTY/  
 FREEMAN FIELD ..... RNAV (GPS) Rwy 27  
 NA when local weather not available.

**LYNCHBURG, VA**  
 LYNCHBURG RGNL/PRESTON GLENN  
 FIELD ..... ILS or LOC Rwy 4<sup>12</sup>  
   RNAV (GPS) Rwy 4<sup>3</sup>  
   RNAV (GPS) Rwy 22<sup>3</sup>  
   VOR/DME Rwy 22<sup>4</sup>  
   VOR Rwy 4<sup>3</sup>

<sup>1</sup>ILS,LOC, NA when control tower closed.

<sup>2</sup>ILS,Categories A,B, 800-2;Category C,900-2½, Category D, 900-2¾. LOC,Category C,900-2½, Category D, 900-2¾.

<sup>3</sup>Category C, 900-2½; Category D, 900-2¾.

<sup>4</sup>Categories A,B, 900-2; Category C, 900-2½,  
 Category D, 900-2¾.

NAME ALTERNATE MINIMUMS  
**MANASSAS, VA**  
 MANASSAS RGNL/HARRY P DAVIS  
 FIELD ..... ILS or LOC Rwy 16L,700-2  
                   RNAV (GPS) Rwy 16L  
 NA when control tower closed.

**MARION/WYTHEVILLE, VA**  
 MOUNTAIN EMPIRE ..... RNAV (GPS) Rwy 26  
 NA when local weather not available.  
 Category C, 800-2½.

**MARTINSVILLE, VA**  
 BLUE RIDGE ..... RNAV (GPS) Rwy 12  
                   RNAV (GPS) Rwy 30<sup>1</sup>  
 NA when local weather not available.  
<sup>1</sup>Category D, 800-2½.

**MELFA, VA**  
 ACCOMACK COUNTY ..... RNAV (GPS) Rwy 3  
                   RNAV (GPS) Rwy 21  
 NA when local weather not available.

**MIDDLETOWN, DE**  
 SUMMIT ..... RNAV (GPS) Rwy 17  
                   RNAV (GPS) Rwy 35  
 NA when local weather not available.

**NEWPORT NEWS, VA**  
 NEWPORT NEWS/WILLIAMSBURG  
 INTL ..... ILS or LOC Rwy 7<sup>12</sup>  
                   ILS or LOC Rwy 25<sup>1</sup>  
                   LOC/DME Rwy 20<sup>12</sup>  
                   RNAV (GPS) Rwy 7<sup>2</sup>  
                   RNAV (GPS) Rwy 20<sup>2</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>NA when local weather not available.

**OCEAN CITY, MD**  
 OCEAN CITY MUNI ..... RNAV (GPS) Rwy 2<sup>1</sup>  
                   RNAV (GPS) Rwy 32<sup>12</sup>  
                   VOR-A<sup>3</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Category D, 800-2½.

<sup>3</sup>Categories A, B, 900-2; Category C, 900-2½;  
 Category D, 900-2½.

**PETERSBURG, VA**  
 DINWIDDIE COUNTY ..... RNAV (GPS) Rwy 5  
                   RNAV (GPS) Rwy 23  
                   VOR Rwy 23  
 NA when local weather not available.

**PHILLIPS AAF (KAPG)**  
 ABERDEEN PROVING  
 GROUND, MD ..... NDB Rwy 22  
                   VOR Rwy 22  
                   VOR/DME Rwy 22  
                   RNAV (GPS) Rwy 22

NA when control tower closed.

NAME ALTERNATE MINIMUMS  
**RICHLANDS, VA**  
 TAZEWELL COUNTY ..... LOC/DME Rwy 25  
                   RNAV (GPS) Rwy 25  
 NA when local weather not available.

**RICHMOND, VA**  
 RICHMOND INTL ..... ILS or LOC Rwy 16  
 ILS, Categories A,B, 900-2, Category C,  
 900-2½, Category D, 900-3.  
 LOC, Categories A,B, 900-2, Category C,  
 900-2½, Category D, 900-3.

**RICHMOND/ASHLAND, VA**  
 HANOVER  
 COUNTY MUNI ..... RNAV (GPS) Rwy 16  
                   VOR Rwy 16<sup>1</sup>  
 NA when local weather not available.  
<sup>1</sup>Category C, 800-2½, Category D, 800-2½.

**ROANOKE, VA**  
 ROANOKE RGNL/WOODRUM  
 FIELD ..... ILS or LOC Rwy 33<sup>12</sup>  
                   LDA Rwy 6<sup>2</sup>  
                   VOR/NDB Rwy 33<sup>3</sup>  
<sup>1</sup>ILS, Categories A,B, 800-2; Category C,  
 800-2½; Category D, 800-2½. LOC,  
 Category C, 800-2½; Category D, 800-2½.  
<sup>2</sup>Categories A,B, 1600-2; Categories C,D,  
 1600-3.  
<sup>3</sup>Categories A,B, 1400-2; Categories C,D,  
 1400-3.

**SALISBURY, MD**  
 SALISBURY-OCEAN CITY  
 WICOMICO RGNL ..... ILS or LOC Rwy 32  
                   RNAV (GPS) Rwy 32  
                   VOR Rwy 23<sup>1</sup>  
 NA when local weather not available.

<sup>1</sup>Categories A, B, 1100-2; Categories C, D,  
 1100-3.

**SOUTH HILL, VA**  
 MECKLENBURG-  
 BRUNSWICK RGNL ..... LOC Rwy 1  
                   RNAV (GPS) Rwy 1  
                   RNAV (GPS) Rwy 19  
 NA when local weather not available.

**STAUNTON-WAYNESBORO-  
 HARRISONBURG, VA**  
 SHENANDOAH VALLEY  
 RGNL ..... ILS or LOC Rwy 5<sup>1</sup>  
                   NDB Rwy 5  
                   RNAV (GPS) Rwy 5  
                   RNAV (GPS) Rwy 23  
 NA when local weather not available.  
<sup>1</sup>ILS, Category D, 700-2.

NAME ALTERNATE MINIMUMS  
**SUFFOLK, VA**  
 SUFFOLK EXECUTIVE ..... **RNAV (GPS) Rwy 4**  
**RNAV (GPS) Rwy 7**  
 NA when local weather not available.

**WALLOPS ISLAND, VA**

WALLOPS FLIGHT  
**FACILITY** ..... **VOR/DME or TACAN Rwy 10**  
 Categories A,B, 900-2; Category C, 900-2½;  
 Category D, 900-2¾.

**WASHINGTON, DC**

WASHINGTON  
 DULLES INTL ..... ILS or LOC/DME Rwy 1C<sup>1</sup>  
                   ILS or LOC/DME Rwy 1L<sup>1</sup>  
                   ILS or LOC/DME Rwy 12<sup>1</sup>  
                   ILS or LOC/DME Rwy 19C<sup>1</sup>  
                   ILS or LOC/DME Rwy 19R<sup>1</sup>  
                   ILS or LOC Rwy 1R<sup>1</sup>  
                   ILS or LOC Rwy 19L<sup>1</sup>  
**RNAV (GPS) Y Rwy 19R<sup>2</sup>**

<sup>1</sup>ILS, Categories A, B, C, D, 700-2.

<sup>2</sup>Category D, 800-2½.

**RONALD REAGAN**

WASHINGTON NATIONAL ..... ILS Rwy 11  
                   LDA/DME Rwy 19<sup>2</sup>  
                   RNAV (GPS) RWY 33<sup>3</sup>  
 ROSSLYN LDA Rwy 19, 1100-3  
                   VOR/DME or GPS Rwy 15<sup>4</sup>  
                   VOR/DME or GPS Rwy 19<sup>5</sup>  
                   VOR Rwy 1<sup>2</sup>

<sup>1</sup>ILS, Categories A, B,C, 700-2; Category D, 700-2½. LOC, Category D, 800-2½.

<sup>2</sup>Category D, 800-2½.

<sup>3</sup>Categories A,B,C,D, 800-2½.

<sup>4</sup>Categories A,B, 1000-2;Category C, 1000-2%; Category D, 1000-3.

<sup>5</sup>Categories A,B, 1000-2; Categories C,D, 1000-3.

NAME ALTERNATE MINIMUMS  
**WEST POINT, VA**  
 MIDDLE  
 PENINSULA RGNL ..... **RNAV (GPS) Rwy 10**  
 VOR-A  
 NA when local weather not available.

**WESTMINSTER, MD**

CARROLL COUNTY RGNL/  
 JACK B POAGE FIELD ... **RNAV (GPS) Rwy 34**  
 NA when local weather not available.

**WILMINGTON, DE**

NEW CASTLE ..... ILS or LOC Rwy 1<sup>12</sup>  
                   RNAV (GPS) Rwy 1<sup>2</sup>  
                   RNAV (GPS) Rwy 9<sup>2</sup>  
                   RNAV (GPS) Rwy 19<sup>2</sup>  
                   RNAV (GPS) Rwy 27<sup>2</sup>  
                   VOR Rwy 1<sup>23</sup>  
                   VOR Rwy 27<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Category D, 800-2½.

**WINCHESTER, VA**

WINCHESTER RGNL ..... **RNAV (GPS) Rwy 14**  
                   RNAV (GPS) Rwy 32  
                   VOR/DME-A

NA when local weather not available.

**WISE, VA**

LONESOME PINE ..... LOC/DME Rwy 24<sup>12</sup>  
                   RNAV (GPS) Rwy 6<sup>12</sup>  
                   RNAV (GPS) Rwy 24<sup>3</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Category D, 800-2½.

<sup>3</sup>Category C, 800-2½; Category D, 900-2¾.

## INSTRUMENT APPROACH PROCEDURE CHARTS

## T IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

## Civil Airports and Selected Military Airports

**ALL USERS:** Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

**CIVIL USERS NOTE:** Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

**MILITARY USERS NOTE:** Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

## NAME TAKE-OFF MINIMUMS

**ABINGDON, VA**

VIRGINIA HIGHLANDS (VJI)

AMDT 2 10266 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6**, 300-2 or 300-1½ w/  
min. climb of 225' per NM to 2500, or std. w/ min. climb  
of 749' per NM to 2500.

DEPARTURE PROCEDURE: **Rwy 6**, climb heading  
061° and HMV VORTAC R-034 to 5500 before  
proceeding on course. **Rwy 24**, climb heading 241° to  
3700 before proceeding on course.

NOTE: **Rwy 6**, vehicle 89' from DER, 411' left of  
centerline, 15' AGL/2094' MSL. Obstruction light 504'  
from DER, 314' left of centerline, 22' AGL/2122' MSL.  
Trees beginning 214' from DER, 245' right of  
centerline, up to 100' AGL/2240' MSL. Trees beginning  
579' from DER, 35' left of centerline, up to 100' AGL/  
2379' MSL. **Rwy 24**, hangar vent 13' from DER, 496'  
left of centerline, 55' AGL/2086' MSL. Buildings 828'  
from DER, 628' left of centerline, up to 25' AGL/2084'  
MSL. Trees beginning 2222' from DER, 262' right of  
centerline, up to 100' AGL/2200' MSL. Tree 3592' from  
DER, 14' left of centerline, 100' AGL/2167' MSL.

## NAME TAKE-OFF MINIMUMS

**ANDREWS AFB/NAF (KADW)**

CAMP SPRINGS, MD. . . . . 09127

TAKE-OFF OBSTACLES: **Rwy 1L**, trees 2972' to 3085'  
from DER, 765' to 906' right of centerline, 93' AGL/355'  
MSL. **Rwy 1R**, trees 1512' from DER, 856' right of  
centerline, 74 AGL/336' MSL; trees 2254' from DER,  
645' left of centerline, 93' AGL/355' MSL; trees 2629'  
from DER, 1095' left of centerline, 93' AGL/355' MSL;

trees 2882' from DER, 364' left of centerline, 104' AGL/  
362' MSL. **Rwy 19L**, terrain 267' from DER, 580' left of  
centerline, 261' MSL; trees 2650' to 2874' from DER,  
946' to 1113' right of centerline, 91' AGL/334' MSL.

**Rwy 19R**, trees 2650' to 2873' from DER, 887' to 1054'  
left of centerline, 91' AGL/334' MSL; tower 4630' from  
DER, 1664' right of centerline, 108' AGL/377' MSL.

**ANNAPOLIS, MD**

## LEE

TAKE-OFF MINIMUMS: **Rwy 30**, 300-1 or std. with a  
min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 12**, climb runway  
heading to 700 before proceeding on course.

**Rwy 30**, climb runway heading to 1000 before  
proceeding right on course. Climb runway heading to  
700 before proceeding left on course.

NOTE: **Rwy 12**, cross departure end of runway at or  
above 35' AGL/66' MSL. **Rwy 30**, trees, 1433' from  
departure end of runway, 85' left of centerline,  
100' AGL/139' MSL. Cross departure end of runway at  
or above 35' AGL/66' MSL.

**BALTIMORE, MD**

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)  
AMDT 9 10266 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 300-1½ or std. w/ min. climb of 210' per NM to 500, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER. **Rwy 33R**, std. w/ min. climb of 251' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 044° to 800 before turning left. **Rwy 28**, climb heading 285° to 900 before turning right. **Rwy 33L**, climb heading 320° to 2000 before turning right.

NOTE: **Rwy 4**, rod on lighted pole 1921' from DER, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from DER, 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from DER, 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from DER, 481' right of centerline, 60' AGL/199' MSL. Tank 1.2 NM from DER, 2274' left of centerline, 173' AGL/338' MSL.

**Rwy 10**, building 52' from DER, 319' left of centerline, 13' AGL/133' MSL. **Rwy 15L**, trees beginning 648' from DER, 619' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from DER, 618' left of centerline, 62' AGL/161' MSL. **Rwy 15R**, trees beginning 1144' from DER, 740' right of centerline, up to 53' AGL/172' MSL.

**Rwy 22**, light poles beginning 213' from DER, 365' left of centerline, up to 30' AGL/189' MSL. **Rwy 28**, tree 1392' from DER, 736' left of centerline, 77' AGL/176' MSL. **Rwy 33L**, fence 203' from DER, 517' right of centerline, 9' AGL/149' MSL. Tree 2250' from DER, 843' right of centerline, 66' AGL/205' MSL. Microwave antenna on building, 4725' from DER, 907' right of centerline, 126' AGL/265' MSL. Building 4693' from DER, 874' right of centerline, 127' AGL/266' MSL. Building-tower 4734' from DER, 922' right of centerline, 140' AGL/260' MSL. **Rwy 33R**, trees beginning 2925' from DER, 321' left of centerline, up to 70' AGL/289' MSL. Trees beginning 975' from DER, 116' right of centerline, up to 83' AGL/262' MSL. Light on pole 2384' from DER, 837' right of centerline, 55' AGL/254' MSL. Light on pole 2736' from DER, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from DER, 370' right of centerline, 40' AGL/242' MSL. Building 998' from DER, 654' left of centerline, 24' AGL/183' MSL. Signal 2453' from DER, 904' left of centerline, 45' AGL/204' MSL. Light on pole 3869' from DER, 603' left of centerline, 72' AGL/251' MSL.

**BALTIMORE, MD (CON'T)**

MARTIN STATE

TAKE-OFF MINIMUMS: **Rwy 15**, 800-2 or std. with a min. climb of 300' per NM to 1000. **Rwy 33**, 1300-2 or std. with a min. climb of 340' per NM to 1700'.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: **Rwy 15**, trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. **Rwy 33**, pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

**BLACKSBURG, VA**

VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

AMDT 4 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 400-1½ or std. w/ min. climb of 563' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 12**, climbing right turn direct PSK VORTAC to 3500 before proceeding on course. **Rwy 30**, climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: **Rwy 12**, bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. **Rwy 30**, trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139' MSL. Vehicle on road beginning 567' from departure end of runway, 310' left of centerline, 24' AGL/2137' MSL. Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2021' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL. Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL. Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL pole and antenna beginning 1149' from departure end of runway, 391' right of centerline, up to 40' AGL/2151' MSL.

**BLACKSTONE, VA**

ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: **Rwy 1**, 1000-2 or std. with a min. climb of 280' per NM to 1700. **Rwy 4**, 1000-2 or std. with a min. climb of 220' per NM to 1700. **Rwy 19**, NA.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before proceeding on course. **Rwy 4**, climb heading 039° to 1700 before proceeding on course.

**Rwy 22**, climb heading 208° to 900 before proceeding on course.

NOTE: **Rwy 4**, 50' AGL tree, 150' from departure end of runway, 450' right of centerline. **Rwy 22**, 66' AGL tree, 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

10266

**BRIDGEWATER, VA**

BRIDGEWATER AIRPARK ( VBW )

AMDT 2 10126 (FAA)

**TAKE-OFF MINIMUMS:** **Rwy 15**, 300-2½ w/min. climb of 280'/NM to 3900', or std. w/min. climb of 440'/NM to 2600, or 2400-3 for climb in visual conditions. **Rwy 33**, 800-2½ w/min. climb of 390'/NM to 5000, or std. w/min. climb of 522'/NM to 2200, or 2400-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:** **Rwy 15**, climb heading 152° to 3900, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course. **Rwy 33**, climb heading 347° to 5000, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course.

**NOTE:** **Rwy 15**, vehicles on roadway 53' from DER, 14' right of centerline, 15' AGL/1180' MSL. Trees beginning 158' from DER, 259' right of centerline, up to 100' AGL/1279' MSL. Trees beginning 499' from DER, 628' left of centerline, up to 100' AGL/1279' MSL. Pole 908' from DER, 183' left of centerline, 35' AGL/1200' MSL. Trees beginning 3205' from DER, 1329' right of centerline, up to 100' AGL/1359' MSL. **Rwy 33**, trees beginning 318' from DER, 252' right of centerline, up to 100' AGL/1249' MSL. Trees beginning 470' from DER, 191' left of centerline, up to 100' AGL/1249' MSL.

**BROOKNEAL, VA**

BROOKNEAL/CAMPBELL COUNTY

**NOTE:** **Rwy 6**, multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL. **Rwy 24**, multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

**CAMBRIDGE, MD**

CAMBRIDGE-DORCHESTER

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1.**CAMP PEARY LNDG STRIP (KW94)**

WILLIAMSBURG, VA . . . . . 08213

**TAKE-OFF OBSTACLES:** **Rwy 5**: trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. **Rwy 23**: trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

**CHARLOTTESVILLE, VA**

CHARLOTTESVILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

**TAKE-OFF MINIMUMS:** **Rwy 3**, std. w/min. climb of 323' per NM to 1500, or 2200-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:** **Rwy 3**, climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course. **Rwy 21**, climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding on course.

**NOTE:** **Rwy 3**, pole 97' from DER, 476' right of centerline, 27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER, 3183' right of centerline, up to 1116' MSL.

**CHASE CITY, VA**

CHASE CITY MUNI

**NOTE:** **Rwy 18**, trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. **Rwy 36**, trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

**CHURCHVILLE, MD**

HARFORD COUNTY

**TAKE-OFF MINIMUMS:** **Rwy 28**, 300-1 or std. with a min. climb of 400' per NM to 600.

**NOTE:** **Rwy 28**, 100' terrain/trees 1150' from departure end of runway.

**CLARKSVILLE, VA**

LAKE COUNTRY RGNL (W63)

AMDT 1 10098 (FAA)

**NOTE:** **Rwy 4**, trees beginning 5' from DER, 438' left of centerline, up to 100' AGL/539' MSL. Building 27' from DER, 94' right of centerline, 20' AGL/449' MSL.

Vehicles on road beginning 200' from DER, from left to right of centerline, up to 15' AGL/444' MSL. Warehouse 313' from DER, on centerline, 75' AGL/495' MSL.

Building 385' from DER, 257' right of centerline, 20' AGL/439' MSL. Trees beginning 444' from DER, 518' right of centerline, up to 100' AGL/509' MSL. **Rwy 22**, trees beginning 3' from DER from 452' left of centerline to 547' right of centerline, up to 100' AGL/422' MSL.

Trees beginning 1624' from DER, from 632' left of centerline to 535' right of centerline, up to 100' AGL/485' MSL.

**CLINTON, MD**

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG - A 10126 (FAA)

**NOTE:** **Rwy 5**, Vehicle on road beginning 20' from DER, on centerline, up to 15' AGL/261' MSL. Antenna on tower beginning 2333' from DER, 556' right of centerline, 137' AGL/361' MSL. **Rwy 23**, Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.

10266

**COLLEGE PARK, MD**

COLLEGE PARK (CGS)

AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-2½ or std. w/min. climb of 486' per NM to 600. **Rwy 33**, 400-2½ or std. w/min. climb of 433' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 149° to 600 before proceeding on course. **Rwy 33**, climb heading 329° to 600 before proceeding on course.

NOTE: **Rwy 15**, trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSL. Antenna 1.1 NM from departure end of runway, 149' left of centerline, 167' AGL/270' MSL. **Rwy 33**, terrain beginning 1 NM from departure end of runway, 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway, 467' right of centerline, 184' AGL/254' MSL. Tower 1.9 NM from departure end of runway, 1447' left of centerline, 255' AGL/405' MSL.

**CRISFIELD, MD**

CRISFIELD MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA-obstacles

DEPARTURE PROCEDURE: **Rwy 14**, climb via heading 142° to 900 before proceeding on course.

**Rwy 32**, climb via heading 322° to 900 before proceeding on course.

**CULPEPER, VA**

CULPEPER RGNL (CJR)

ORIG 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 22**, climb heading 218° to 1000 before turning right.

NOTE: **Rwy 4**, tree 79' from departure end of runway, 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410' MSL. **Rwy 22**, tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

**CUMBERLAND, MD**

GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: **Rwy 5**, 1700-2 or std. with a min. climb of 300' per NM to 3400. **Rwy 11**, 1600-2 or std. with a min. climb of 520' per NM to 3400. **Rwy 23**, 1200-2 or std. with a min. climb of 660' per NM to 3400. **Rwy 29**, NA.

DEPARTURE PROCEDURE: **Rwys 5, 11**, climb runway heading to 3400 before proceeding on course. **Rwy 23**, climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

**DANVILLE, VA**

DANVILLE RGNL (DAN)

AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1¼ or std. with a min. climb of 299' per NM to 900.

NOTE: **Rwy 2**, tree 1092' from DER, 8' left of centerline, 67' AGL/586' MSL. Tree 1524' from DER, 659' right of centerline, 67' AGL/606' MSL. **Rwy 13**, trees beginning 569' from DER, 300' right of centerline, up to 100' AGL/759' MSL. Trees beginning 680' from DER, 308' left of centerline, up to 65' AGL/604' MSL. **Rwy 20**, tree 1328' from DER, 633' right of centerline, 30' AGL/569' MSL. **Rwy 31**, hanger 395' from DER, 573' left of centerline, 23' AGL/602' MSL. Pole 1002' from DER, 375' left of centerline, 29' AGL/608' MSL. Antenna 1165' from DER, 416' left of centerline, 62' AGL/641' MSL. Trees beginning 1206' from DER, 287' left of centerline, up to 80' AGL/699' MSL. Trees beginning 2180' from DER, 632' right of centerline, up to 62' AGL/681' MSL.

**DAVISON AAF (KDAA)**

FORT BELVOIR, VA

.....Rwy 32, 300-1\*

\* Or standard with minimum climb of 380/NM to 500.

TAKE-OFF OBSTACLES: Rwy 32, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

**DOVER AFB (KDOV)**

DOVER, DE ..... 09155

TAKE-OFF OBSTACLES: **Rwy 1**, possible aircraft/vehicles at DER hammerhead just left of rwy centerline, up to 65' AGL/91' MSL. **Rwy 19**, possible aircraft/vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. **Rwy 32**, multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL. Bldg 3900' from DER, 760' left of centerline, 88' AGL/119' MSL. Possible taxiing aircraft/vehicles on taxilane Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL. Possible large aircraft 2800' from DER, on taxilane Golf just left of centerline, up to 65' AGL/92' MSL.

**DOVER/CHESWOLD, DE**

DELAWARE AIRPARK

NOTE: **Rwy 9**, multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149' MSL. Pole line 1151' from departure end of runway, 36' right of centerline, 50' AGL/99' MSL. Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. **Rwy 27**, multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100' AGL/164' MSL.

10266

**DUBLIN, VA**

NEW RIVER VALLEY (PSK)

AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24**, 200-1% or std. w/ min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course.

**Rwy 24**, climb heading 238° to 4000 before proceeding on course.

NOTE: **Rwy 6**, tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. **Rwy 24**, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL. Terrain 68' from DER, 281' right of centerline, up to 2116' MSL.

**EASTON, MD**

EASTON/NEWNAM FIELD

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. w/ climb of 241' per NM to 500.

NOTE: **Rwy 4**, vehicles on roads beginning 199' from departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of runway, 38' left of centerline, 47' AGL/116' MSL.

**Rwy 15**, fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning 721' from departure end of runway, 183' left of centerline, up to 64' AGL/123' MSL. Multiple poles beginning 828' from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline, up to 89' AGL/148' MSL. Multiple trees beginning 1357' from departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. **Rwy 22**, tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL. Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. **Rwy 33**, multiple trees 10' from departure end of runway, 19' right of centerline, up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

**ELKTON, MD**

CECIL COUNTY

TAKE-OFF MINIMUMS: NOTE: **Rwy 13**, cross

departure end of runway at or above 27' AGL/89' MSL. **Rwy 31**, 300-1½ or std. w/ min. climb of 290' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 308° to 900 before turning left.

NOTE: **Rwy 13**, trees 185' from departure end of runway, 110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. **Rwy 31**, trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100' AGL/309' MSL.

**EMPIORIA, VA**

EMPIORIA-GREENSVILLE RGNL (EMV)

ORIG 09155 (FAA)

NOTE: **Rwy 15**, vehicle on roadway 21' from DER, 291' left of centerline, up to 15' AGL/124' MSL. Trees beginning 56' from DER, 245' right of centerline, up to 60' AGL/169' MSL. Trees beginning 98' from DER, 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387' from DER, 387' left of centerline, up to 60' AGL/149' MSL. **Rwy 33**, trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline, up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER, 524' right of centerline, up to 15' AGL/144' MSL. Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

**FARMVILLE, VA**

FARMVILLE RGNL (FVX)

AMDT 1 10154 (FAA)

NOTE: **Rwy 3**, trees beginning 64' from DER, 156' left of centerline, up to 77' AGL/506' MSL. Trees beginning 149' from DER, 398' right of centerline, up to 93' AGL/502' MSL. **Rwy 21**, vehicle on road 97' from DER, 475' left of centerline, up to 15' AGL/422' MSL. Trees beginning 56' from DER, 21' right of centerline, up to 80' AGL/489' MSL. Trees beginning 553' from DER, 53' left of centerline, up to 55' AGL/491' MSL.

**FELKER AAF (KFAF),**

FORT EUSTIS, VA . . . . . 08297

**Rwy 14**, 32 standard.

TAKE-OFF OBSTACLES: **Rwy 14**: Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL. **Rwy 32**: Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186' left of centerline up to 74' AGL/85' MSL.

**FORT MEADE (ODENTON), MD**

TIPTON

NOTE: **Rwy 10**, cross departure end of runway at or above 17' AGL/167' MSL. **Rwy 10**, trees 1052' right of departure end of runway, 88' AGL/238' MSL.

# T TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES T

10266

## FRANKLIN, VA

FRANKLIN MUNI-JOHN BEVERLY ROSE

(FKN)

AMDT 2 09071 (FAA)

NOTE: **Rwy 9**, trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. **Rwy 27**, trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44' MSL.

## FREDERICK, MD

FREDERICK MUNI

TAKE-OFF MINIMUMS: **Rwy 12**, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 2000 before proceeding on course. **Rwy 30**, climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.

## FREDERICKSBURG, VA

SHANNON

TAKE-OFF MINIMUMS: **Rwy 24**, 800-3 or std. with a min. climb of 290' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 24**, climb to 800 via runway heading before proceeding on course.

NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

## FRIENDLY, MD

POTOMAC AIRFIELD

TAKE-OFF MINIMUMS: **Rwys 6,24**, 300-1.

NOTE: **Rwy 6**, 50' AGL trees 300' left of departure end of runway. 75' AGL trees 320' right of departure end of runway. **Rwy 24**, 80' AGL trees 200' right of departure end of runway. 75' AGL trees 200' left of departure end of runway. 30' AGL hanger 200' from departure end of runway, 190' right of centerline.

## FRONT ROYAL, VA

FRONT ROYAL-WARREN COUNTY (FRR)

AMDT 1 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 415' per NM to 1100. **Rwy 28**, NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 10**, climbing left turn direct MRB VORTAC before proceeding on course.

NOTE: **Rwy 10**, vehicles on roadway beginning 221' from DER, left and right of centerline, up to 17' AGL/736' MSL. Powerlines beginning 835' from DER, left and right of centerline, up to 79' AGL/828' MSL. Trees beginning 1060' from DER, 51' left of centerline, up to 100' AGL/779' MSL. Trees beginning 1660' from DER, 550' right of centerline, up to 100' AGL/939' MSL.

## GAITHERSBURG, MD

MONTGOMERY COUNTY AIRPARK

TAKE-OFF MINIMUMS: NOTE: **Rwy 14**, 62' AGL trees 197' right of centerline. **Rwy 32**, 63' AGL trees 335' left of centerline.

## GALAX-HILLSVILLE, VA

TWIN COUNTY

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. with a min. climb of 240' per NM until passing 3000. **Rwy 1**, 300-1 or std. with a min. climb of 310' per NM until passing 3000.

## GEORGETOWN, DE

SUSSEX COUNTY

TAKE-OFF MINIMUMS: **Rwys 4,13,22,31**, 300-1.

## GRUNDY, VA

GRUNDY MUNI

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. with a min. climb of 240' per NM to 2700.

## HAGERSTOWN, MD

HAGERSTOWN RGNL -RICHARD A. HENSON FIELD

TAKE-OFF MINIMUMS: **Rwy 2**, 300-1.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. **Rwys 2,20**, climb to 2000 before turning eastbound.

## HOT SPRINGS, VA

INGALLS FIELD

TAKE-OFF MINIMUMS: **Rwy 7**, 500-1 or std. with a min. climb of 320' per NM to 4400. **Rwy 25**, 600-1 or std. with a min. climb of 390' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4400 before proceeding on course.

**Rwy 25**, climb runway heading to 5000 before proceeding on course.

## INDIAN HEAD, MD

MARYLAND

TAKE-OFF MINIMUMS: **Rwy 36**, 300-1½ or std. w/ min. climb of 360' per NM to 600.

NOTE: **Rwy 18**, trees abeam departure end of runway, 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGL/256' MSL. Trees abeam departure end of runway, 125' right of centerline, up to 100' AGL/256' MSL. Tower 6170' from departure end of runway, 620' right of centerline, 190' AGL/384' MSL. **Rwy 36**, trees 258' from departure end of runway, 309' left of centerline, up to 100' AGL/271' MSL. Tree 567' from departure end of runway, 125' left of centerline, 60' AGL/230' MSL. Rising terrain beginning 73' from departure end of runway, 64' right of centerline, 180' MSL.

**JONESVILLE, VA**

LEE COUNTY

**TAKE-OFF MINIMUMS:** **Rwy 7**, std. w/min. climb of 46' per NM to 3800, or 1900-3 for climb in visual conditions. **Rwy 25**, std. w/min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:** **Rwys 7, 25**, for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

**NOTE:** **Rwy 7**, terrain 116' from departure end of runway, 72' right of centerline, 1439' MSL. Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSL.

**LANGLEY AFB (KLFI)**

HAMPTON, VA

..... Orig 07354  
..... **Rwy 8**, 500-3\*

\* Or standard with minimum climb of 240 ft/NM to 700.

**NOTE:** Rwy 26, cross DER at or above

10' AGL/18' MSL.

**TAKE-OFF OBSTACLES:** **Rwy 8**, Boat 2261' from DER, 779' left of centerline, 60' AGL/80' MSL. Boat 2500' from DER, 59' left of centerline, 60' AGL/70' MSL. Vehicle on road 1051' from DER, 702' right of centerline, 15' AGL/43' MSL. Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL. Multiple towers 2.0 NM from DER, 1.7 NM right of centerline, 503' AGL/511' MSL. Rwy 26, Tree 4050' from DER, 685' left of centerline, 100' AGL/120' MSL. Tree 4840' from DER, 687' left of centerline, 100' AGL/136' MSL. Tree 4044' from DER, 31' left of centerline, 101' AGL/113' MSL. Tree 4153' from DER, 342' right of centerline, 101' AGL/114' MSL. Tree 4037' from DER, 623' right of centerline, 101' AGL/110' MSL. Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER, 1184' right of centerline, 100' AGL/133' MSL.

**LAUREL, DE**

LAUREL

**DEPARTURE PROCEDURE:** **Rwys 15, 33**, climb runway heading to 1200 before proceeding on course.

**LAWRENCEVILLE, VA**

LAWRENCEVILLE/BRUNSWICK MUNI

**TAKE-OFF MINIMUMS:** **Rwys 6,24**, NA.

**NOTE:** **Rwy 18**, trees 1654' from departure end of runway, 772' left of centerline, 88' AGL/407' MSL. Trees 200' from departure end of runway, on centerline, 22' AGL/321' MSL. **Rwy 36**, trees 1487' from departure end of runway, 20' left of centerline, 88' AGL/420' MSL. Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

**LEESBURG, VA**

LEESBURG EXECUTIVE (JYO)

AMDT 2 10266 (FAA)

**DEPARTURE PROCEDURE:** **Rwy 35**, climb heading 351° to 1200 before proceeding on course.

**NOTE:** **Rwy 17**, vehicle on roadway, 320' from DER, 565' left of centerline, up to 15' AGL/414' MSL. Building 167' from DER, 360' left of centerline, 22' AGL/401' MSL. Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL. **Rwy 35**, terrain 96' from DER, 453' left of centerline, 381' MSL. Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

**LEONARDTOWN, MD**

ST. MARY'S COUNTY RGNL

**NOTES:** **Rwy 11**, multiple trees beginning 88' from departure end of runway, 339' left of centerline, up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. **Rwy 29**, multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline, 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

**LOUISA, VA**

LOUISA COUNTY/FREEMAN FIELD (LKU)

AMDT 1 10210 (FAA)

**NOTE:** **Rwy 9**, trees beginning abeam DER, 316' right of centerline, up to 100' AGL/589' MSL. Trees beginning 765' from DER, 644' left of centerline, up to 95' AGL/545' MSL. Trees beginning 889' from DER, 150' right of centerline, up to 59' AGL/519' MSL. **Rwy 27**, trees beginning abeam DER, 350' right of centerline, up to 100' AGL/569' MSL. Trees beginning 212' from DER, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 70' from DER, 513' left of centerline, up to 100' AGL/569' MSL. Building 148' from DER, 440' left of centerline, 14' AGL/484' MSL. Trees beginning 587' from DER, left and right of centerline, up to 100' AGL/549' MSL.

**LURAY, VA**

LURAY CAVERNS

**TAKE-OFF MINIMUMS:** **Rwys 4, 22**, 1000-3

**DEPARTURE PROCEDURE:** Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on course.

## LYNCHBURG, VA

FALWELL

**TAKE-OFF MINIMUMS:** **Rwy 10**, 1100-2% for climb in visual conditions. **Rwy 28**, NA-obstacle.

**DEPARTURE PROCEDURE:** **Rwy 10**, for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.

**NOTE:** **Rwy 10**, multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway, 1192' right of centerline, up to 149' AGL/968' MSL.

## LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

AMDT 8 08073 (FAA)

**TAKE-OFF MINIMUMS:** **Rwy 17**, 300-2½ or std. w/min. climb of 232' per NM to 1500. **Rwy 35**, std. w/min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:** **Rwy 4**, climb heading 036° to 2200 before proceeding on course. **Rwy 17**, climb heading 169° to 1800 before turning right. **Rwy 22**, climb heading 216° to 1800 before turning right. **Rwy 35**, climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Field at or above 2500' MSL before proceeding on course.

**NOTE:** **Rwy 4**, trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway, 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/948' MSL. Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL. Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL. **Rwy 17**, trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. **Rwy 22**, trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/979' MSL. Poles beginning 2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. **Rwy 35**, trees beginning 2955' from departure end of runway, 140' right of centerline up to 96' AGL/1014' MSL. Trees beginning 722' from departure end of runway, 71' left of centerline up to 119' AGL/1037' MSL. Pole 36' from departure end of runway 98' left of centerline, 25' AGL/943' MSL.

## MANASSAS, VA

MANASSAS RGNL/HARRY P. DAVIS FIELD

**NOTE:** **Rwy 16R**, terrain 64' from departure end of runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL. Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway, 40' left of centerline, up to 100' AGL/279' MSL. **Rwy 16L**, terrain 56' from departure end of runway, 177' left of centerline, 179' MSL. Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL. Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. **Rwy 34R**, sign 70' from departure end of runway, 91' right of centerline, 6' AGL/196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL. **Rwy 34L**, terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68' AGL/274' MSL.

## MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE

**TAKE-OFF MINIMUMS:** **Rwy 8**, 300-1. **Rwy 26**, 800-1.

**DEPARTURE PROCEDURE:** **Rwy 8**, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. **Rwy 26**, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

**MARTINSVILLE, VA**

BLUE RIDGE (MTV)

AMDT 3 10042 (FAA)

**TAKE-OFF MINIMUMS:** **Rwy 12**, std. with a min. climb of 249' per NM to 2100 or 1900-3 for climb in visual conditions. **Rwy 30**, std. with a min. climb of 321' per NM to 4300 or 1900-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:** **Rwy 12**, climb heading 125° to 2200 before proceeding on course. For climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course. **Rwy 30**, for climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course.

**NOTE:** **Rwy 12**, trees beginning 316' from DER, 320' left of centerline, up to 47' AGL/956' MSL. Trees beginning 38' from DER, 380' right of centerline, 82' AGL/941' MSL. **Rwy 30**, trees beginning 82' from DER, 9' right of centerline, up to 100' AGL/1058' MSL. Vehicle on road 638' from DER, 418' right of centerline, 15' AGL/974' MSL. Obstruction light on DME 1031' from DER, 304' right of centerline, 18' AGL/977' MSL. Fence 947' from DER, 400' right of centerline, 12' AGL/971' MSL. Trees beginning 102' from DER, 94' left of centerline, up to 77' AGL/1047' MSL.

**MELFA, VA**

ACCOMACK COUNTY

**NOTE:** **Rwy 3**, multiple trees beginning 41' from departure end of runway, 221' right of centerline, up to 84' AGL/128' MSL. Truck on road 204' from departure end of runway, 231' left of centerline, 15' AGL/61' MSL. Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL. Truck on road 494' from departure end of runway, 228' left of centerline, 15' AGL/62' MSL. Rod on obstruction light tower 862' from departure end of runway, 402' left of centerline, 55 AGL/99' MSL. **Rwy 21**, multiple trees beginning 27' from departure end of runway, 395' right of centerline, up to 91' AGL/135' MSL. Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSL.

**MIDDLETON, DE**

SUMMIT

**TAKE-OFF MINIMUMS:** **Rwy 35**, 300-1, or std. with a min. climb of 280' per NM to 400.

**MITCHELLVILLE, MD**

FREEWAY

**TAKE-OFF MINIMUMS:** **Rwy 18**, 300-1 or std. with a min. climb of 295' per NM to 500. **Rwy 36**, 300-1 or std. with a min. climb of 500' per NM to 600.

**NOTE:** **Rwy 18**, trees 328' from departure end of runway, 20' AGL/178' MSL. Trees 838' from departure end of runway, 337' left of centerline, 50' AGL/220' MSL. **Rwy 36**, cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL. Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

**MONETA, VA**

SMITH MOUNTAIN LAKE

**TAKE-OFF MINIMUMS:** **Rwys 5, 23**, 300-1.

**DEPARTURE PROCEDURE:** **Rwys 5, 23**, climb straight ahead to 1600 before proceeding on course.

**NEWPORT NEWS, VA**

NEWPORT NEWS/WILLIAMSBURG INTL

**TAKE-OFF MINIMUMS:** **Rwy 20**, 300-1½ or standard with a minimum climb of 255' per NM to 300.

**NOTE:** **Rwy 2**, bush 295' from departure end of runway, 291' right of centerline 22' AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/131' MSL. Pole 1221' from departure end of runway, 487' right of centerline 31' AGL/81' MSL. Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132' MSL. Multiple trees beginning 1554' from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161' MSL. **Rwy 7**, tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL. T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116' MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191' MSL. **Rwy 20**, bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL. Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. **Rwy 25**, tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of centerline 86' AGL/106' MSL. Tree 3435 from departure end of runway, 1125' right of centerline 116' AGL/139' MSL.

**NORFOLK, VA**

CHESAPEAKE RGNL

**DEPARTURE PROCEDURE:** **Rwys 5, 23**, climb runway heading to 500 before proceeding on course.

**NOTE:** **Rwy 5**, cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. **Rwy 23**, cross departure end of runway at or above 25' AGL/43' MSL. Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

**NORFOLK, VA (CON'T)****HAMPTON ROADS EXECUTIVE**

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 21' per NM to 700, or alternatively w/ std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to departure end of runway or 1700-2½' for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 2**, climb heading 019° to 1600 before turning west. **Rwy 10**, climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course.

**Rwy 20**, climb heading 199° to 1000 before turning North. **Rwy 28**, climb heading 282° to 1500 before turning North.

NOTE: **Rwy 2**, multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. **Rwy 10**, trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/92' MSL.

**Rwy 20**, vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline, up to 100' AGL/124' MSL. Vehicle on road and multiple trees beginning 595' from departure end of runway, 8' right of centerline, up to 100' AGL/124' MSL. **Rwy 28**, multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL. Vehicle on road 3' from departure end of runway, 112' right of centerline, 17' AGL/34' MSL. Multiple trees beginning 2595' from departure end of runway, 362' right of centerline, up to 100' AGL/124' MSL.

**NORFOLK, VA (CON'T)****NORFOLK INTL**

NOTES: **Rwy 5**, mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSL. Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL. Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL, obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline, 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17' MSL. **Rwy 14**, tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL. **Rwy 23**, rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. **Rwy 32**, multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway, 135' left of centerline, up to 12' AGL/27' MSL.

**NORFOLK NS (CHAMBERS FIELD)(KNGU)**

NORFOLK, VA . . . . .  
08269

**Rwy 28**: 300-1½\*

\* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: **Rwy 10**: Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48' MSL.

**OAKLAND, MD**

GARRETT COUNTY (2G4)

ORIG 08101 (FAA)

NOTE: **Rwy 9**, Multiple trees beginning 75' from departure end of runway, 94' left of centerline, up to 100' AGL/293' MSL. Multiple trees beginning 76' from departure end of runway, 47' right of centerline, up to 100' AGL/293' MSL. **Rwy 27**, Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/301' MSL. Multiple trees beginning 19' from departure end of runway, 107' right of centerline, up to 100' AGL/301' MSL.

**OCEAN CITY, MD**

OCEAN CITY MUNI

TAKE-OFF MINIMUMS: **Rwys 2, 32**, 400-2 or std. with a min. climb of 260' per NM to 500.

**OCEANA NAS (APOLLO SOUCEK FIELD)(KNTU)**

VIRGINIA BEACH, VA. . . . . 09351

TAKE-OFF OBSTACLES: **Rwy 5L**, Trees 115' MSL, 3706' from DER, 97' right of centerline. **Rwy 5R**, Trees 115' MSL, 3706' from DER, 603' left of centerline. **Rwy 14L**, Trees 105' MSL, 2792' from DER, 7' left of centerline. **Rwy 14R**, Trees 105' MSL, 2792' from DER, 708' left of centerline.

**ORANGE, VA**

ORANGE COUNTY

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1.

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1500 before turning.

**PATUXENT RIVER NAS (TRAPNELL FIELD),(KNHK)**

PATUXENT RIVER, MD . . . . . 09267

**Rwy 6**, Obstacle identification surface begins 15' above DER.

**Rwy 14**, Obstacle identification surface begins 35' above DER.

**Rwy 20**, Obstacle identification surface begins 20' above DER.

**Rwy 24**, Obstacle identification surface begins 15' above DER.

TAKE-OFF OBSTACLES: **Rwy 6**, Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. **Rwy 14**, Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER. Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline. Trees 43' AGL/59' MSL, 520' from DER, 637' right of centerline. **Rwy 20**, Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of centerline. **Rwy 24**,

43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline. Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

**PETERSBURG, VA**

DINWIDDIE COUNTY (PTB)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 32, 14**, NA-obstacles.

NOTE: **Rwy 5**, numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGL/254' MSL. Fence 161' from departure end of runway, 472' right of centerline, 7' AGL/196' MSL. Tree 1031' from departure end of runway, 690' right of centerline, 57' AGL/256' MSL. **Rwy 23**, numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway, 476' left of centerline, 10' AGL/199' MSL. Numerous trees beginning 819' from departure end of runway, 528' left of centerline, up to 72' AGL/281' MSL.

**PHILLIPS AAF (KAPG)**

ABERDEEN PROVING GROUND, MD . . 07270

TAKE-OFF OBSTACLES: **Rwy 4**, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL.

Trees 1126' from DER, 118' left of centerline, 29' AGL/88' MSL. **Rwy 22**, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL.

Multiple trees beginning 398' from DER, 311' right of centerline, up to 50' AGL/89' MSL. Tree 1094' from DER, 49' left of centerline, 43' AGL/62' MSL.

**QUANTICO MCAF (TURNER FIELD)**

(KNYG)

QUANTICO, VA . . . . . 09295

Diverse departures not authorized.

**Rwy 2**, 400-2½\*

**Rwy 20**, 300-1½\*\*

\* Or standard with minimum civil climb of 470 ft/NM to 600, minimum military climb of 410 ft/NM to 500.

\*\* Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400.

DEPARTURE PROCEDURE: **Rwy 2**, Climbing right turn to 2000 direct BRV VORTAC or to assigned heading for radar vectors. **Rwy 20**, Climb to 2000 direct BRV VORTAC or as assigned for radar vectors.

TAKE-OFF OBSTACLES: **Rwy 2**, Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline. Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. **Rwy 20**, Terrain 27' MSL, starting 347' from DER, 192' right of centerline. Trees 34' AGL/213' MSL, 5749' from DER, 1878' right of centerline.

**QUINTON, VA**

NEW KENT COUNTY (W96)

AMDT 1 10154 (FAA)

NOTE: **Rwy 10**, trees beginning at DER, left and right of centerline, up to 100' AGL/239' MSL. **Rwy 28**, trees beginning at DER, left and right of centerline, up to 100' AGL/239' MSL.

**RICHLANDS, VA**

TAZEWELL COUNTY

TAKE-OFF MINIMUMS: **Rwy 7**, 300-1 or std. with a min. climb of 430' per NM to 3000. **Rwy 25**, 300-1 or std. with a min. climb of 280' per NM to 2900.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4700 before proceeding southbound.

**Rwy 25**, climb runway heading to 4100 before proceeding southbound.

**RICHMOND, VA**

CHESTERFIELD COUNTY

TAKE-OFF MINIMUMS: **Rwy 15**, 800-1 or std. with a min. climb of 280' per NM to 1200. **Rwy 33**, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1200' before proceeding on course.

**Rwy 33**, climb runway heading to 1700' before proceeding on course.

NOTE: **Rwy 15**, 18' AGL pole 1315' from departure end of runway, 304' left of centerline. **Rwy 33**, 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

**RICHMOND, VA (CON'T)**

RICHMOND INTL (RIC)

AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, 200-1½ or std. w/ min. climb of 230' per NM to 400, or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to DER.

NOTE: **Rwy 2**, aircraft on surface beginning 3' from DER, 202' right of centerline, up to 65' AGL/232' MSL. Trees and bushes beginning 104' from DER, 223' left of centerline, up to 100' AGL/251' MSL. Trees beginning 2918' from DER, 367' right of centerline, up to 100' AGL/260' MSL. **Rwy 7**, trees beginning 1208' from DER, 798' right of centerline, up to 100' AGL/259' MSL. Trees beginning 1347' from DER, 283' left of centerline, up to 100' AGL/259' MSL. **Rwy 20**, hangar 817' from DER, 665' right of centerline, 43' AGL/212' MSL. Trees beginning 2307' from DER, 1065' left of centerline, up to 100' AGL/235' MSL. Trees beginning 2645' from DER 759' right of centerline, up to 100' AGL/255' MSL. Pole 3226' from DER, 424' right of centerline, 79' AGL/248' MSL. **Rwy 25**, vehicles on road beginning 390' from DER, on centerline, up to 15' AGL/184' MSL. Train on railroad beginning 545' from DER, on centerline, up to 23' AGL/192' MSL. Tower 799' from DER, 562' left of centerline, 16' AGL/185' MSL. Trees beginning 2414' from DER, 285' right of centerline, up to 100' AGL/279' MSL. Multiple poles beginning 3056' from DER, 565' left of centerline, up to 83' AGL/252' MSL. Trees beginning 3176' from DER, 357' left of centerline, up to 100' AGL/269' MSL. **Rwy 34**, aircraft on surface beginning 12' from DER, 192' left of centerline, up to 65' AGL/230' MSL. Hangar and light pole beginning 1103' from DER, 732' left of centerline, up to 41' AGL/200' MSL. Trees beginning 2202' from DER, 1052' right of centerline, up to 100' AGL/232' MSL. Trees beginning 2689' from DER, 998' left of centerline, up to 100' AGL/237' MSL.

**RICHMOND/ASHLAND, VA**

HANOVER COUNTY MUNI (OFP)

ORIG 09239 (FAA)

NOTE: **Rwy 16**, trees beginning 48' from DER, 479' left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of centerline, up to 104' AGL/294' MSL. **Rwy 34**, road and trees beginning 149' from DER, 345' right of centerline, up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 366' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER, 445' right of centerline, up to 100' AGL/290' MSL. Trees beginning 2714' from DER, 487' right of centerline, up to 104' AGL/304' MSL.

**RIDGELY, MD**

RIDGELY AIRPARK

NOTE: **Rwy 12**, multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.

10266

**ROANOKE, VA**

ROANOKE RGNL/ WOODRUM FIELD (ROA)

AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 33**, NA - obstacles.**Rwy 24**, std. w/min. climb of 216' per NM to 2600.DEPARTURE PROCEDURE: **Rwy 15**, climb heading 154° to intercept the ROA VORTAC R-122 to 4000 before proceeding on course. **Rwy 24**, climb west on I-SZK LDA localizer course on 4200 to DIXXY Int/I-SZK 15.25 DME before proceeding on course.NOTE: **Rwy 15**, trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL.**Rwy 24**, bush 86' from departue end of runway, 385' left of centerline, 4' AGL/1163' MSL. Tree 150' from departure end of runway, 415' right of centerline, 60' AGL/1171' MSL. Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.**SALISBURY, MD**

SALISBURY-OCEAN CITY WICOMICO RGNL

(SBY)

ORIG 07354 (FAA)

NOTE: **Rwy 5**, trees and antennas beginning 961' from departure end of runway, 49' left of centerline, up to 83' AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. **Rwy 23**, trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL. **Rwy 32**, trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline, up to 23' AGL/72' MSL. Trees beginning 2215' from departure end of runway, 140' left of centerline, up to 79' AGL/128' MSL.**SALUDA, VA**

HUMMEL FIELD

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before turning on course.NOTE: **Rwy 1**, 23' AGL tree left of departure end of runway, 65' AGL tree 663' from departure end of runway, 129' left of centerline. **Rwy 19**, 26' AGL tree 237' from departure end of runway, 116' right of centerline.**SOUTH BOSTON, VA**

WILLIAM M. TUCK

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1. **Rwys 5, 23**, NA.NOTE: **Rwy 1**, 72' AGL tower 324' from departure end of runway, 283' left of runway centerline.**SOUTH HILL, VA**

MECKLENBURG-BRUNSWICK RGNL (AVC)

AMDT 2 10210 (FAA)

NOTE: **Rwy 1**, train on tracks 118' from DER, 514' left of centerline, 23' AGL/452' MSL. Trees beginning 181' from DER, 408' left of centerline, up to 80' AGL/500' MSL. Trees beginning 1858' from DER, 600' right of centerline, up to 71' AGL/500' MSL. **Rwy 19**, trees beginning 191' from DER, 13' left of centerline, up to 77' AGL/457' MSL. Trees beginning 1176' from DER, 57' right of centerline, up to 76' AGL/500' MSL.**STAFFORD, VA**

STAFFORD RGNL

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. **Rwy 33**, climbing left turn to 2000, intercept and proceed via BRV R-306 to BRV VORTAC, before proceeding on course. NOTE: **Rwy 33**, cross departure end of runway at or above 34' AGL/246' MSL.**STAUNTON-WAYNESBORO-HARRISONBURG, VA**

SHENANDOAH VALLEY RGNL (SHD)

AMDT 6 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5**, std. w/min. climb of 273' per NM to 3800, or 2200-2½ for climb in visual conditions.**Rwy 23**, standard, or 2200-2½ for climb in visual conditions.DEPARTURE PROCEDURE: **Rwy 5**, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. **Rwy 23**, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.NOTE: **Rwy 5**, trees 1720' from DER, 635' right of centerline, up to 100' AGL/1279' MSL. **Rwy 23**, tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.**STEVENSVILLE, MD**

BAY BRIDGE

TAKE-OFF MINIMUMS: **Rwy 29**, 500-3 or std. w/min. climb of 317' per NM to 800.NOTE: **Rwy 11**, road 354' from departure end of runway, on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471' from departure end of runway, 32' left of centerline, up to 100' AGL/119' MSL. Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to 100' AGL/119' MSL. **Rwy 29**, twin bridges 2.25 NM from departure end of runway, 2767' right of centerline, 410' AGL/410' MSL.

10266

**SUFFOLK, VA****SUFFOLK EXECUTIVE**

TAKE-OFF MINIMUMS: **Rwys 4, 7, 22, 300-1. Rwy 25,** 300-1 or std. w/ a min. climb of 260' per NM to 300'. Alternatively, with standard takeoff minimums and a normal 200' /NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway. NOTE: **Rwy 4**, trees 1050' from departure end of runway, 250' left of centerline, up to 100' AGL/169' MSL. Trees 1076' from departure end of runway, 105' left of centerline, up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169' MSL. Powerline 3056' from departure end of runway, 524' right of centerline, 105' AGL/174' MSL. **Rwy 7**, trees 1143' from departure end of runway, 688' left of centerline, up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105 AGL/169' MSL.

Powerline 2176' from departure end of runway, 259' left of centerline, 105' AGL/169' MSL. Trees 2430' from departure end of runway, 118' right of centerline, up to 100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105 AGL/174' MSL. **Rwy 22**, road 536' from departure end of runway, 62' left of centerline, 15' AGL/84' MSL. Trees 1403' from departure end of runway, 765' left of centerline, up to 100' AGL/169' MSL. Trees 3595' from departure end of runway, 792' right of centerline, up to 100' AGL/174' MSL. **Rwy 25**, road 198' from departure end of runway, 33' right of centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169' MSL. Trees 3258' from departure end of runway, 57' right of centerline, up to 100' AGL/174' MSL.

**TANGIER, VA****TANGIER ISLAND (TGI)**

ORIG 09015 (FAA)

NOTE: **Rwy 2**, vehicle on road 343' from departure end of runway, on centerline, 15' AGL/19' MSL. Boat masts 638' from departure end of runway, 632' right to 755' left of centerline, up to 63' MSL. **Rwy 20**, buildings beginning 7' from departure end of runway, 206' left of centerline, 45' AGL/50' MSL. Rock wall at departure end of runway, 57' right of centerline, 4' AGL/8' MSL.

**TAPPAHANNOCK, VA****TAPPAHANNOCK-ESSEX COUNTY**

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 303' per NM to 500. **Rwy 28**, 300-1 or std. w/ min. climb of 366' per NM to 500.

NOTE: **Rwy 10**, terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139' MSL. **Rwy 28**, terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

**WALLOPS ISLAND, VA****WALLOPS FLIGHT FACILITY (WAL)**

ORIG 09127 (FAA)

NOTE: **Rwy 4**, trees beginning 1254' from DER, 741' left of centerline, up to 100' AGL/109' MSL. Trees beginning 1814' from DER, 79' right of centerline, up to 100' AGL/134' MSL. **Rwy 10**, trees beginning 1252' from DER, 818' left of centerline, up to 100' AGL/124' MSL. **Rwy 17**, trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL. **Rwy 22**, trees beginning 793' from DER, 315' left of centerline, up to 100' AGL/129' MSL. **Rwy 28**, trees beginning 945' from DER, 495' right of centerline, up to 100' AGL/139' MSL. **Rwy 35**, trees beginning 3' from DER, 394' left of centerline, up to 100' AGL/124' MSL. Trees beginning 21' from DER, 219' right of centerline, up to 100' AGL/124' MSL.

**WAKEFIELD, VA****WAKEFIELD MUNI**

DEPARTURE PROCEDURE: Climb straight ahead to 500 before proceeding on course.

**WARRENTON, VA****WARRENTON-FAQUIER (HWY)**

ORIG 09099 (FAA)

NOTE: **Rwy 15**, trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL. Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL. Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL. Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL. Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL. **Rwy 33**, trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGL/413' MSL.

**WASHINGTON, DC****RONALD REAGAN WASHINGTON NATIONAL**

TAKE-OFF MINIMUMS: **Rwy 22**, 400-2½ or std. with a min. climb of 210' per NM to 500. **Rwy 33**, 700-3 or std. with a min. climb of 260' per NM to 700. **Rwy 1**, 600-2 or std. with a min. climb of 370' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned. **Rwy 19**, climb heading 184° to 500 before turning right. **Rwy 33**, intercept DCA R-328. Climb to 5000 or as assigned.

NOTE: **Prohibited area, P-56, 1.5 NM north of airport.**

**WASHINGTON DULLES INTL (IAD)**

AMDT 1 08325 (FAA)

NOTE: **Rwy 1L**, tower 1918' from departure end of runway, 680' left of centerline, 56' AGL/330' MSL.

**Rwy 1C**, tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL. **Rwy 1R**, post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL. **Rwy 12**, tree 520' from departure end of runway, 604' left of centerline, 28' AGL/307' MSL.

**Rwy 30**, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway, 600' right of centerline, up to 64' AGL/383' MSL.

**WEST POINT, VA**

MIDDLE PENINSULA RGNL (FYJ)

ORIG 08157 (FAA)

NOTE: **Rwy 10**, multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 28**, multiple trees beginning 33' from departure end of runway, left and right of centerline, up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline, 135' AGL/135' MSL.

**WESTMINSTER, MD**

CARROLL COUNTY RGNL/JACK B. POAGE FIELD

TAKE-OFF MINIMUMS: **Rwy 16**, 400-1 or std. with a min. climb of 210' per NM to 1300. **Rwy 34**, 300-1 or std. with a min. climb of 320' per NM to 1000.

NOTE: **Rwy 16**, 87' AGL trees 644' from departure end of runway. **Rwy 34**, 102' AGL trees 116' from departure end of runway, 220' right of centerline.

**CLEARVIEW AIRPARK (2W2)**

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, 300-2 1/4 or std. w/ min. climb of 290' per NM to 1200.

NOTE: **Rwy 14**, vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL. Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL. **Rwy 32**, vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

**WILLIAMSBURG, VA**

WILLIAMSBURG-JAMESTOWN

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.**WILMINGTON, DE**

NEW CASTLE

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. w/ min. climb of 266' per NM to 300.

NOTE: **Rwy 1**, multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGL/120' MSL, tree 1219' from departure end of runway, 482' right of centerline, 57' AGL/118' MSL, bush 118' from departure end of runway, 385' left of centerline, 4' AGL/65' MSL. **Rwy 9**, multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway, 66' left of centerline, 53' AGL/124' MSL, light pole 948' from departure end of runway, 596' right of centerline, 44' AGL/115' MSL, tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway, 457' left of centerline, 29' AGL/100' MSL. **Rwy 14**, obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL, rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL. **Rwy 19**, antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway, 850' right of centerline, 45' AGL/120' MSL, obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. **Rwy 27**, tree 697' from departure end of runway, 533' left of centerline, 68' AGL/147' MSL. Tree 1110' from departure end of runway, 584' right of centerline, 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/107' MSL, bush 408' from departure end of runway, 415' left of centerline, 12' AGL/91' MSL. **Rwy 32**, tree 711' from departure end of runway, 207' right of centerline, 29' AGL/104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

**WINCHESTER, VA**

WINCHESTER RGNL

TAKE-OFF MINIMUMS: **Rwy 32**, 800-2 or std. with a min. climb of 210' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 32**, climb runway heading to 1700 before turning on course.

**WISE, VA**

LONESOME PINE (LNP)

AMDT 3 10210 (FAA)

DEPARTURE PROCEDURE: **Rwy 6**, climb on heading 062° to 3600 before proceeding on course.

**Rwy 24**, climb on heading 247° to 4900 before proceeding on course.

NOTE: **Rwy 6**, trees beginning 775' from DER, left and right of centerline, up to 100' AGL/2801' MSL. Terrain beginning 86' from DER, left and right of centerline, up to 2728' MSL. **Rwy 24**, trees beginning 159' from DER, left and right of centerline, up to 100' AGL/2794' MSL. Obstruction light on LOC 308' from DER 22' left of centerline, 8' AGL/2678' MSL. Obstruction light on LOC 304' from DER 22' right of centerline, 8' AGL/2678' MSL. Obstruction light on LOC/DME 306' from DER, 189' right of centerline, 15' AGL/2685' MSL. Terrain 159' from DER, 363' left of centerline, 2676' MSL.

## AIRPORT DIAGRAM

**DOVER, DELAWARE**

## AIRPORT DIAGRAM

DOVER, DELAWARE

DOVER AFB (KDOV)

**DOVER AFB** (DOV)(KDOV) AF 3 E UTC-5(-4DT) N39°07.77' W75°27.96' **WASHINGTON**  
 28 B TPA—See Remarks AOE Class IV, ARFF Index A NOTAM FILE DOV Not insp. H-101, 121, L-34F, A  
**RWY 14-32:** H12903X150 (PEM) PCN 82 R/B/W/T HIRL  
**RWY 14:** PAPI(P2L). Thld dispclcd 4250'. **RWY 32:** REIL. PAPI(P4L).

**RWY 01-19:** H9602X200 (PEM) PCN 52 R/B/W/T HIRL CL

**RWY 01:** ALSF2. TDZL. PAPI(P4L). **RWY 19:** ALSF1. PAPI(P4L).

**MILITARY SERVICE:** LGT Rwy 01 and Rwy 19 PAPI and ILS glide paths not coincident except for height group 4 acft (A300, B1, B747/767/777, C5, DC10, E4, KC10, VC25). PAPI provides proper TCH for height group 4 acft only. Rwy 04 PAPI on left side. **JASU 3(MA-1A)** (M32A-86) (adapters not avbl.) **FUEL** A+  
**FLUID SP PRESAIR LPOX LOX OIL 0-133-148 SOAP TRAN ALERT** Opr 24 hours.

**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Information. **RSTD** Non-DOD civil acft ops 72 hrs PPR by contacting (302) 736-6614. PPR except AMC, Special Air Mission, DoD courier svc, and evacuation mission DSN 445-2861. All acft with hazardous material/rqr remote/isolated parking will ctc 436 airborne pulse search radar Explosive Handling Section DSN 445-2304 1230-2130Z‡ or ATOC Duty Officer DSN 445-2300 2130-2130Z‡ for PPR. Base OPS DSN 445-2861/4192, C302-677-2861/4192. All inbound passenger/cargo acft must ctc Comd Post no later than 30 min prior to ldg. Rwy 32 tkf distance avbl 10,070'. AMC acft opr restricted during Bird Watch condition Moderate (tkf or ldg permission only when dep/arr route avoid identified bird activity, no local IFR/VFR tfc pattern activity) and Severe (tkf and ldg prohibited without OG/CC approval), ctc Base OPS for current Bird Watch condition. No practice apch between 0300-1200Z‡ (0400-1200Z‡ during Bird Aircraft Strike Hazard Phase II). ATC will approve 1 apch to full stop ldg only. Acft taxiing out of main ramp using taxi lane between Delta row and spot Echo must use minimum power and in-board engine only (C5 acft should not exceed 40 percent N1 RPM) when turning onto Twy A. **CAUTION** Possible jet wake turbulence in tfc pattern and C5 jet blast during gnd opr. High speed, low alt heavy jet traffic within 10 NM. Five civilian arpt located within 10 NM radius. Special hazard exist for wide body acft taxiing from ramp. Follow me truck rqr for all movements on ramp by non C5 tran acft, tran C5 follow me svc avbl on request. Tree line east of Rwy 19 apch end may cause wind shear during ldg when wind is from southeast. Bird hazard Oct-Apr. Breaking action less than optimum when rwy is wet due to rubber build-up. **TFC PAT TPA**—Rectangular 1804(1776), overhead 2504(2476). Aero Club/lgt acft 1004(976). **NS ABMTT** Strict compliance with procedure rqr. **MISC** First 1000' Rwy 01-19 concrete, middle 7600' asphalt. Twy D edge lghts 40' from twy edge between Rwy 32 hold line and Rwy 01-19. Rwy 32 first 2000', 1000' southeast of Twy C and last 1000' concrete, remainder of rwy asphalt. Rwy 14-32 grooved full length exc at the intersection of Rwy 01-19. First 4250' Rwy 14 and first 1650' Rwy 32 grooved concrete, middle 7000' asphalt. Afld management has no COMSEC avbl for tran aircrews. Tran aircrews should plan to arr with appropriate amount of COMSEC to complete entire mission. Afld management has limited COMSEC storage for tran aircrews.

**WEATHER DATA SOURCES:** ASOS DSN 445-2698 C302-677-2698.

**COMMUNICATIONS:** **D-ATIS** 135.05 273.5 DSN 445-2847. 269.125 (134.1 thru Comd Post) **PTD** 134.1  
**SMYRNA RCO** 122.1R 111.4T (MILLVILLE RADIO)

**(R) APP CON** 132.425 135.15X 142.2X 257.875 (VFR sequencing svc 25 NM out on 125.9 282.325)

**TOWER** 126.35 279.625 **GND CON** 118.875 225.4 **CLNC DEL** 125.55 289.4

**(R) DEP CON** 134.425 257.875 323.0

**COMD POST** 134.1 349.4 **PMSV METRO** Automated ASOS in use, DSN 445-2698, C302-677-2698. Full wx svc avbl Mon-Fri 1100-2300Z‡, clsd weekends and holidays. Wx flight DSN 445-4175/76, C(302) 677-4175/76. Wx briefings for tran aircrew are avbl via the 15 operational squadron (OWS) at Scott AFB, DSN 576-9755/9702, C(618) 256-9755/9702. Jet side svc 1 stop-shop prints IFM crew packages. Building obstruction may impact prevailing visibility 150°-260°. During evac of Wx flight contact 15 OWS at number above. Alternate wx location visibility slightly limited due to building and parked aircraft. ATC will supplement observation as needed.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE DOV.

**SMYRNA (L) VORTAC** 111.4 ENO Chan 51 N39°13.90' W75°30.96' 168° 6.6 NM to fld. 10/9W.

**(T) TACAN** Chan 37 DOV (110.0) N39°07.94' W75°28.04' at fld. 17/9W. No NOTAM MP Wed 1100-1400Z‡ (2000/2+1).

**ILS 109.95** I-DOV Rwy 01. No NOTAM MP Mon, Tue, Thu, Fri 1100-1430Z‡ (2000/2+1).

**ILS 111.9** I-LIR Rwy 19. Back course unusable. No NOTAM MP Mon, Tue, Thu, Fri 0800-1100Z‡ (3000/5+1) ILS Wheel crossing height data: Group 4(18.1').

**COMM/NAV/WEATHER** **REMARKS:** Radar No NOTAM MP Mon, Tue, Thu, Fri 0800-1100Z‡ (3000/5+1).

LOC I-DOV	APCH CRS	Rwy Idg	9602
<b>109.95</b>	<b>013°</b>	<b>TDZE</b>	<b>24</b>
		Appt Elev	28

LOC I-DOV	APCH CRS	Rwy Idg	9602
<b>109.95</b>	<b>013°</b>	<b>TDZE</b>	<b>24</b>
		Appt Elev	28

Rwy Idg	9602
<b>TDZE</b>	<b>24</b>
Appt Elev	28

AL-562 [USAF]

DOVER AFB (KDOV)

▼ \* Circling not authorized SW of Rwy 1 and 14.

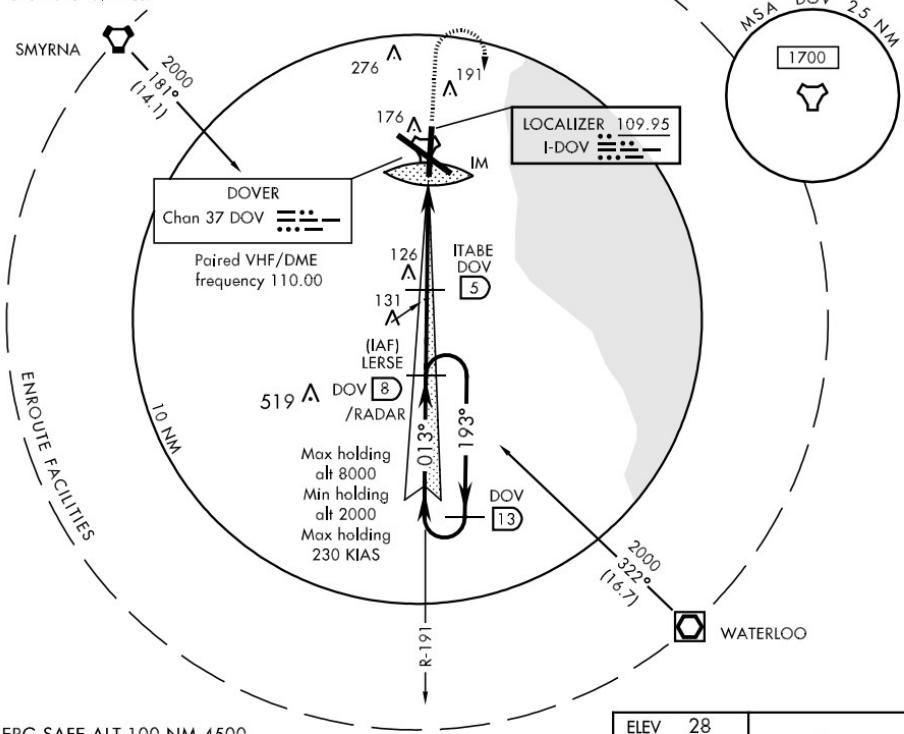
\*\* When ALS inop, increase RVR to 40 and vis to  $\frac{3}{4}$  mile. When TDZ/CL inop, increase CAT AB RVR to 24.

ALSF-2



MISSSED APPROACH: Climb to 1100, then climbing right turn to 2000 direct LERSE and hold.

ATIS	DOVER APP CON	DOVER TOWER	GND CON	CLNC DEL					
<b>135.05</b>	<b>273.5</b>	<b>132.425</b>	<b>257.875</b>	<b>126.35</b>	<b>279.625</b>	<b>118.875</b>	<b>225.4</b>	<b>125.55</b>	<b>289.4</b>

\*\*\* When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to  $1\frac{1}{4}$  miles.

NE-3, 23 SEP 2010 to 21 OCT 2010

VGSI and ILS glidepath  
not coincident except for  
height group 4 aircraft.  
TCH 51

CATEGORY

A

B

C

D

E

S-ILS 1\*\*

224/18 200 (200-1/2)

224/24 200 (200-1/2)

S-LOC 1\*\*\*

380/24 356 (400-1/2)

380/40 356 (400-3/4)

CIRCLING \*

500-1 520-1

520-1½ 580-2

1060-3

472 (500-1) 492 (500-1)

492 (500-1½) 552 (600-2)

1032(1100-3)

DOVER, DELAWARE

39°08'N-75°28'W

DOVER AFB (KDOV)

Amdt 1 10042



DOVER, DELAWARE

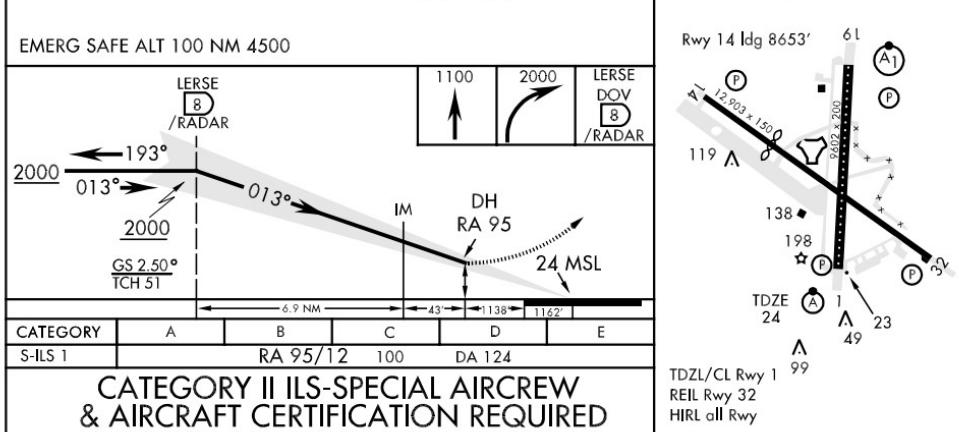
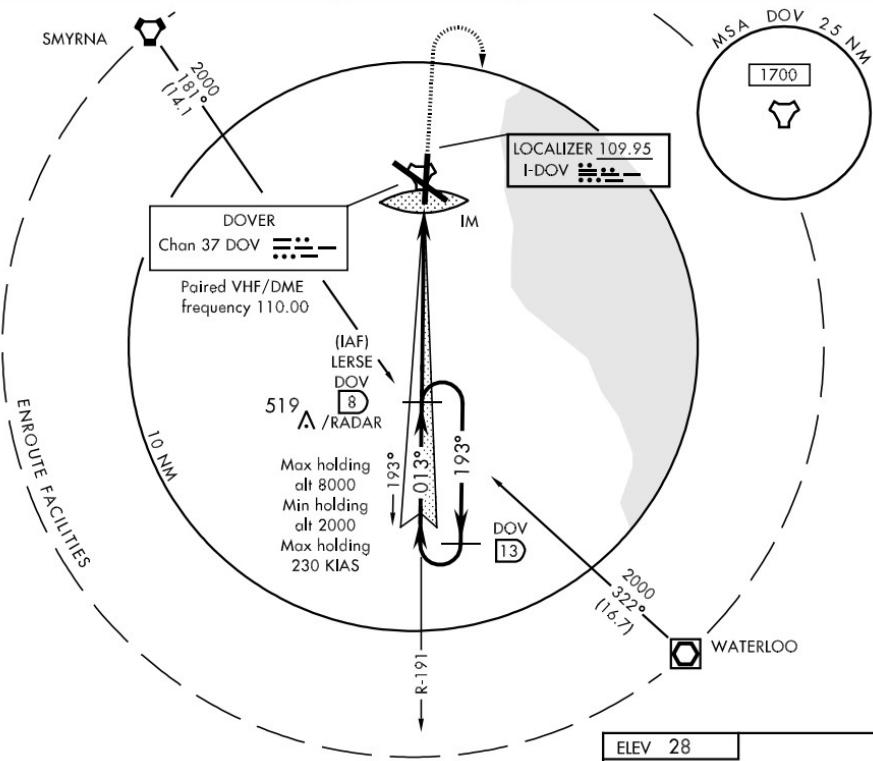
LOC I-DOV <b>109.95</b>	APCH CRS <b>013°</b>	Rwy Idg <b>9602</b> TDZE <b>24</b> Arpt Elev <b>28</b>
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AL-562 [USAF]

ILS RWY 1 (CAT II)

DOVER AFB (KDOV)

V	ALSF-2 (A)	MISSIED APPROACH: Climb to 1100, then climbing right turn to 2000 direct LERSE and hold.
ATIS <b>135.05 273.5</b>	DOVER APP CON <b>132.425 257.875</b>	DOVER TOWER <b>126.35 279.625</b>
GND CON <b>118.875 225.4</b>		CLNC DEL <b>125.55 289.4</b>



DOVER, DELAWARE

39° 08'N-75° 28'W

DOVER AFB (KDOV)

Orig 10042

ILS RWY 1 (CAT II)

NE-3, 23 SEP 2010 to 21 OCT 2010

APCH CRS  
013° | Rwy 1dg 9602  
TDZE 24  
Arpt Elev 28

AL-562 [USAF]

LSF-2

MISSED APPROACH: Climbing right turn to 2000 direct LARBE and hold.

**T** \* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1½ miles, CAT DE vis to 1½ miles.  
\*\* Circling not authorized SW of Rwy 1 and 14.

ATIS  
135.05 273.5

DOVER APP CON  
**132.425    257.875**

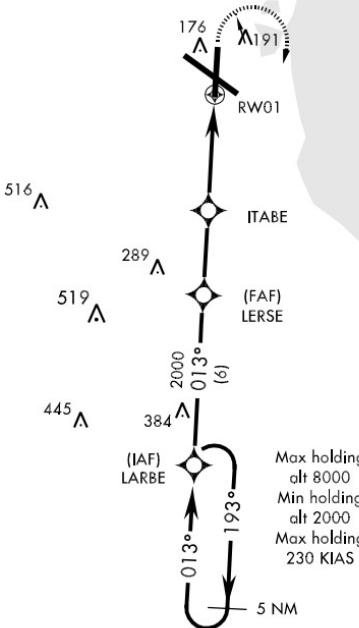
**DOVER TOWER  
126.35 279.625**

GND CON  
18.875 225.4

CLNC DEL  
125.55 289.4

DME/DME RNP-0.3 NA.

276 A



EMERG SAFE ALT 100 NM 4500

5 NM  
Holding pattern

This figure shows a portion of an aeronautical chart. It includes several runway numbers (2000, 013°, 1160) and associated headings (193°, 013°, 1160). Labels for 'LARBE', 'LERSE', 'ITABE', and 'RW01' are present. A vector labeled '1.5 NM to RW01' points towards the right edge of the chart.

CATEGORY	3.0 NM		4.1 NM		E
	A	B	C	D	
LNAV MDA *	480/24	456 (500-½)	480/40 456 (500-¾)	480/50	456 (500-1)
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032(1100-3)

TDZL/CL Rwy 1  
REIL Rwy 32  
HIRL all Rwy

**DOVER, DELAWARE**

39°08'N-75°28'W

DOVER AFB (KDOV)

RNAV (GPS) RWY 1

APCH CRS 193°	Rwy Idg 9602
TDZE 22	Arpt Elev 28

AL-562 [USAF]

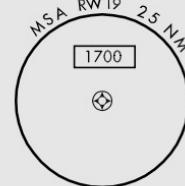
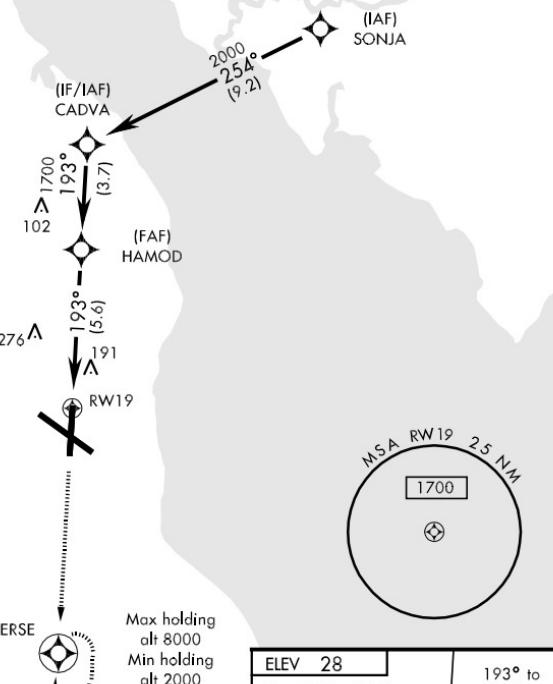
DOVER AFB (KDOV)

▼ \*When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,  
CAT C RVR to 60 and vis to 1½ miles, CAT DE vis to 1½ miles.  
\*\* Circling not authorized SW of Rwy 1 and 14.

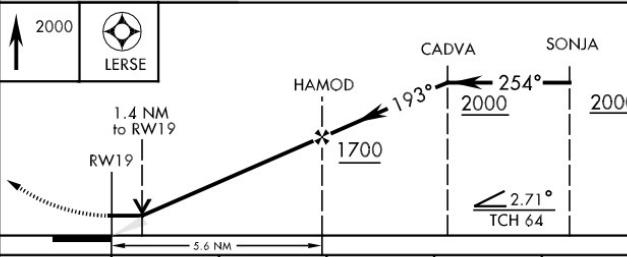
MISSSED APPROACH: Climb to 2000 direct  
LERSE and hold.ATIS  
135.05 273.5DOVER APP CON  
132.425 257.875DOVER TOWER  
126.35 279.625GND CON  
118.875 225.4CLNC DEL  
125.55 289.4

DME/DME RNP-0.3 NA

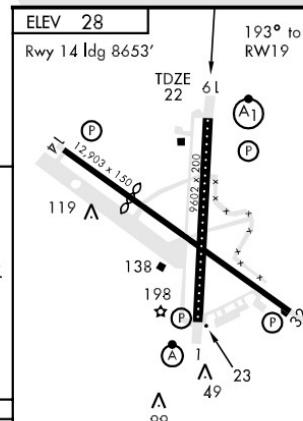
Caution: 3.7 NM intermediate segment length. Recommend early landing configuration.



EMERG SAFE ALT 100 NM 4500



CATEGORY	A	B	C	D	E
LNAV MDA *	480/24 458 (500-½)		480/40 458 (500-¾)		480/50 458 (500-1)
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-½)	580-2 552 (600-2)	1060-3 1032 (1100-3)



APCH CRS 316°	Rwy Idg 12,903 26
TDZE Arpt Elev 28	

V \* Circling not authorized SW of Rwy 1-14.  
DME/DME RNP-0.3 NA.

MISSIED APPROACH: Climbing right turn to 2000 direct TIDEY and hold.

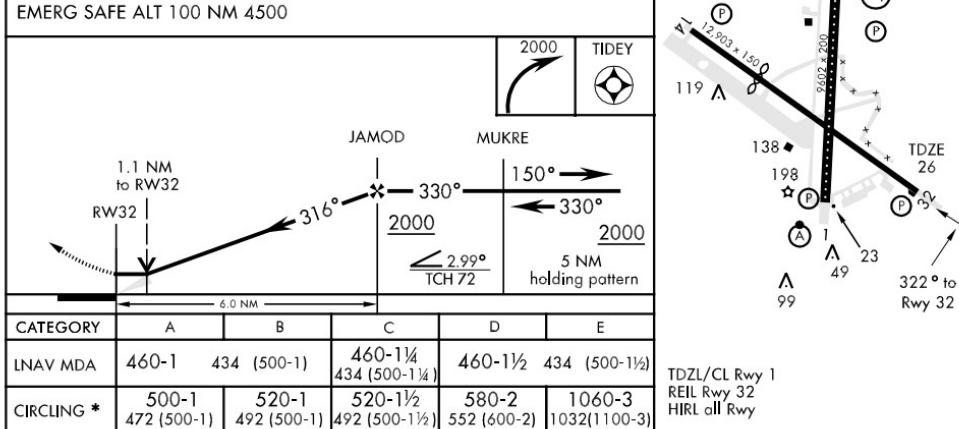
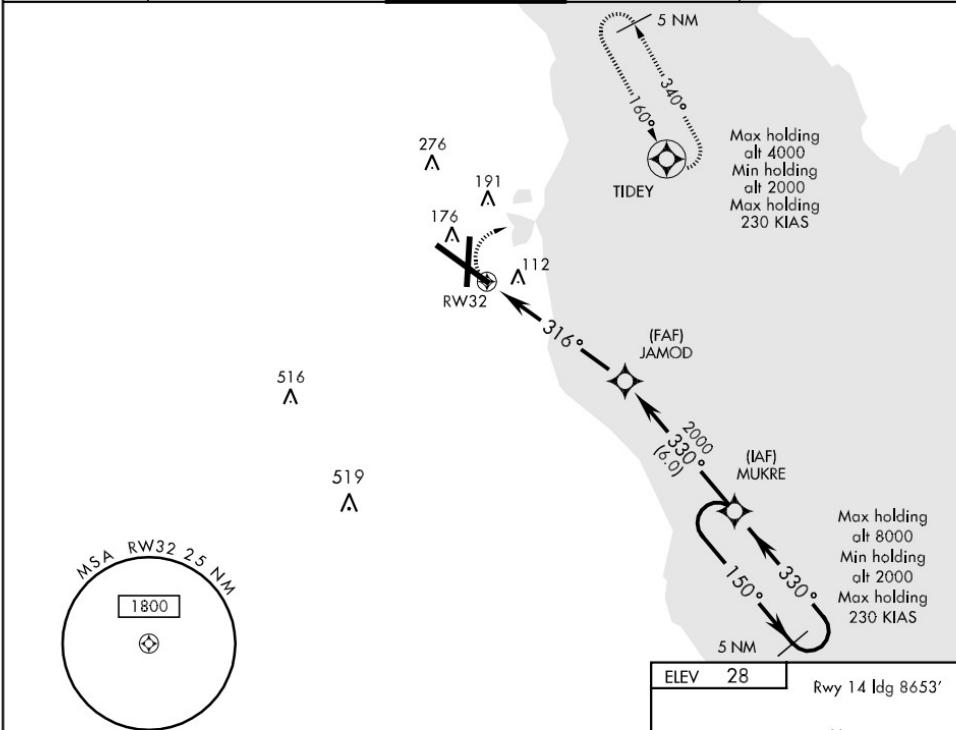
ATIS  
135.05 273.5

DOVER APP CON  
132.425 257.875

DOVER TOWER  
126.35 279.625

GND CON  
118.875 225.4

CLNC DEL  
125.55 289.4



09155

DOVER AFB (KDOV)

DOVER, DELAWARE

## SEA ISLE-FIVE DEPARTURE (SIE5•SIE)

ATIS 135.05 273.5

CLNC DEL

125.55 289.4

GND CON

118.875 225.4

DOVER TOWER

126.35 279.625

DOVER DEP CON

323.0

WASHINGTON CENTER

127.7 285.4

DOVER APP CON

132.425 257.875

DOVER RADAR

125.9 359.3

SHL-562 [USAF]

HAMPTON  
113.6 HTO Chan 83

L-33-34, H-10

ROBBINSVILLE  
113.8 RBV Chan 85

J62

R-081

SHLEP

NANTUCKET  
116.2 ACK Chan 109

L-33, H-10

SEA ISLE  
114.8 SIE Chan 95

MANTA

056°  
(64)

R-122

DOVER  
Chan 37 DOV

RWY 32 TODA 10,070'

Chart not to scale



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1: Climb on a track of 013° for radar vectors to SIE VORTAC. Thence ...

TAKE-OFF RWY 14: Climb on a track of 150° for radar vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 19: Climb on a track of 193° for radar vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 32: Climb on a track of 350° for radar vectors to SIE VORTAC. Thence ...

Via (Transition) or (Assigned Route).

HAMPTON TRANSITION: (SIE5•HTO) Via SIE R-059 and HTO VORTAC R-236 to HTO.

NANTUCKET TRANSITION: (HIGH ALT ONLY) (SIE5•ACK) Via SIE R-059, HTO VORTAC R-236 and J62 to ACK VOR/DME.

SEA ISLE-FIVE DEPARTURE (SIE5•SIE)

DOVER, DELAWARE

DOVER AFB (KDOV)

(ENO.ENO3) 10154

ST-562 (FAA)

DOVER AFB  
DOVER, DELAWARE

## SMYRNA THREE ARRIVAL

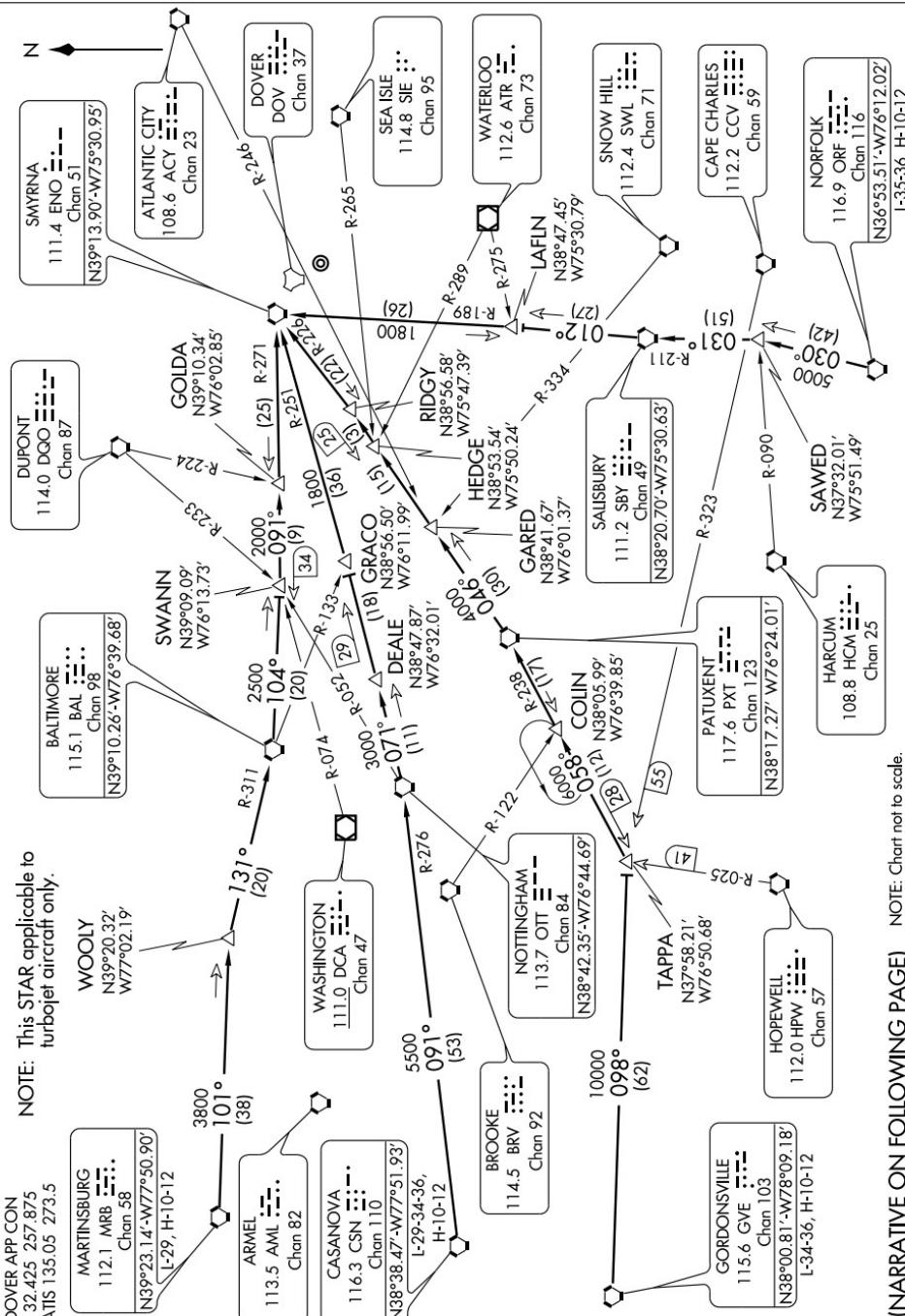
**NOTE:** This STAR applicable to turbojet aircraft only.

DOVER APP CON  
32.425 257.875  
ATIS 135.05 273.5

## SMYRNA THREE ARRIVAL

(FNO FNO3) 10154

DOVER, DELAWARE  
DOVER AFB



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## ARRIVAL DESCRIPTION

CASANOVA TRANSITION (CSN.ENO3): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Then from OTT VORTAC via OTT R-071 and ENO R-251 to ENO VORTAC. Thence . . . .

GORDONSVILLE TRANSITION (GVE.ENO3): From over GVE VORTAC via GVE R-098 and PXT R-238 to PXT VORTAC. Then from PXT VORTAC via PXT R-046 and ENO R-226 to ENO VORTAC. Thence . . . .

MARTINSBURG TRANSITION (MRB.ENO3): From over MRB VORTAC via MRB R-101 and BAL R-311 to BAL VORTAC. Then from BAL VORTAC via BAL R-104 and ENO R-271 to ENO VORTAC. Thence . . . .

NORFOLK TRANSITION (ORF.ENO3): From over ORF VORTAC via ORF R-030 and SBY R-211 to SBY VORTAC. Then from SBY VORTAC via SBY R-012 and ENO R-189 to ENO VORTAC. Thence . . . .

. . . . Expect radar vectors to final approach course from ENO VORTAC.

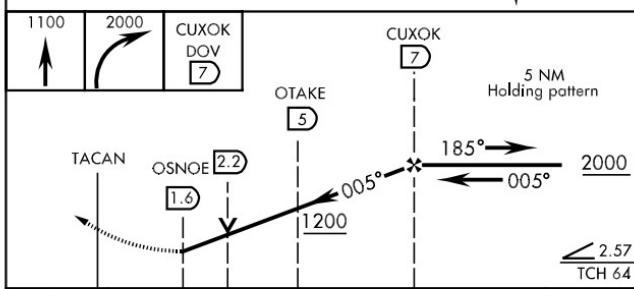
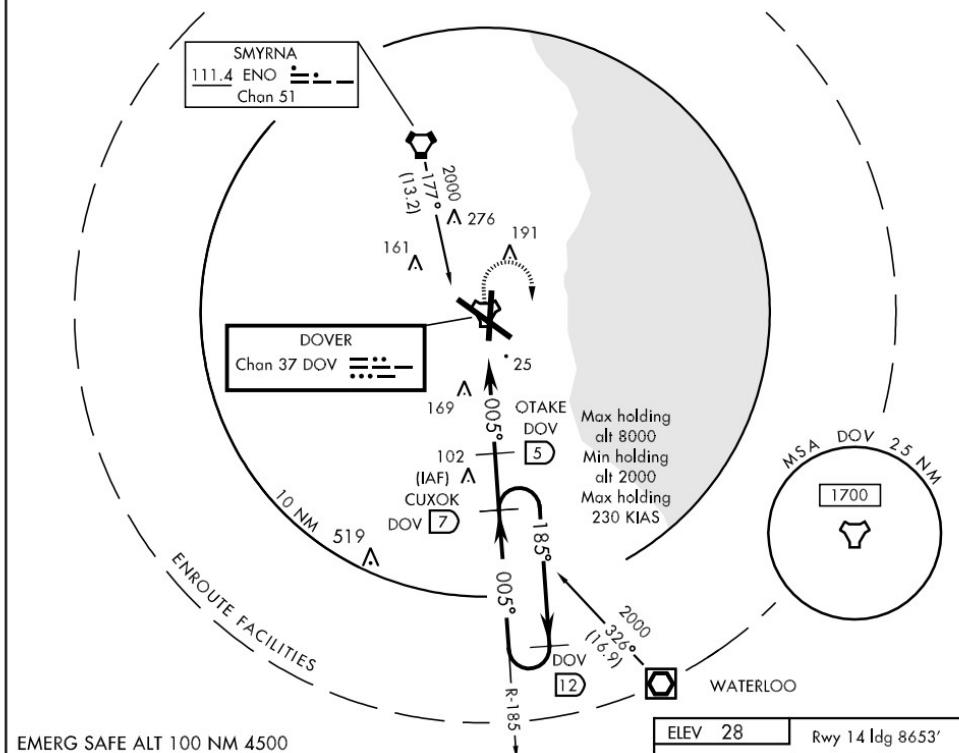
TACAN DOV	APCH CRS	Rwy 1dg 9602
Chan 37	005°	TDZE 24
		Arpt Elev 28

AL-562 [USAF]

DOVER AFB (KDOV)

V \* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,  
 CAT CD RVR to 60 and vis to 1½ miles, CAT E vis to 1½ miles.  
 \*\* Circling not authorized SW of Rwy 1 and 14.

ALSF-2

MISSSED APPROACH: Climb to 1100, then  
climbing right turn to 2000 direct CUXOK  
and hold.ATIS  
135.05 273.5DOVER APP CON  
132.425 257.875DOVER TOWER  
126.35 279.625GND CON  
118.875 225.4CLNC DEL  
125.55 289.4

CATEGORY	A	B	C	D	E
S-1 *	440/24	416 (500-½)	440/40	416 (500-¾)	440/50
					416 (500-1)
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032(1100-3)

DOVER, DELAWARE

39°08'N-75°28'W

Orig 10042

DOVER AFB (KDOV)

TACAN DOV  
Chan 37APCH CRS  
201°Rwy Idg 9602  
TDZE 22  
Arpt Elev 28

AL-562 [USAFA]

DOVER AFB (KDOV)

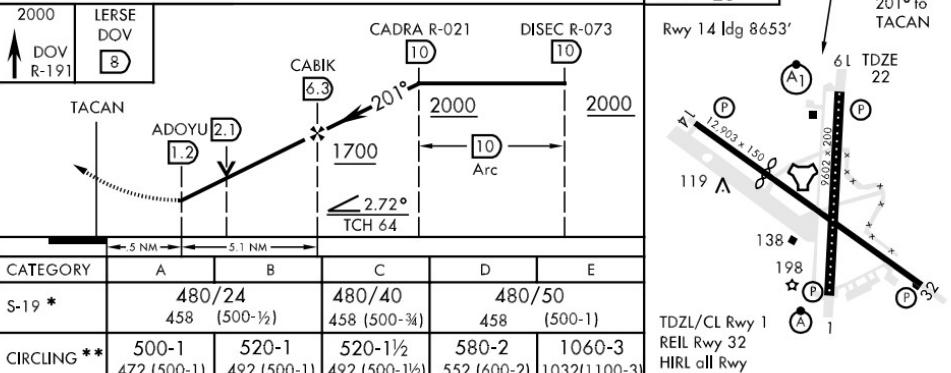
<b>ATIS</b> <b>135.05 273.5</b>	<b>DOVER APP CON</b> <b>132.425 257.875</b>	<b>DOVER TOWER</b> <b>126.35 279.625</b>	<b>GND CON</b> <b>118.875 225.4</b>	<b>CLNC DEL</b> <b>125.55 289.4</b>
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**CAUTION:**

3.7 NM intermediate segment length. Recommend early configuration.

NE-3 23 SEP 2010 to 21 OCT 2010

EMERG SAFE ALT 100 NM 4500



\* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1½ miles, CAT DE vis to 1½ miles.  
\*\* Circling not authorized SW of Rwy 1 and 14.

ALSF-1  
(A1)

MISSSED APPROACH: Climb to 2000 via DOV TACAN R-191 to LERSE and hold.

NE-3 23 SEP 2010 to 21 OCT 2010

TACAN DOV APCH CRS **Rwy 1dg 12,903**  
 Chan **37** TDZE **26**  
**321°** Arpt Elev **28**

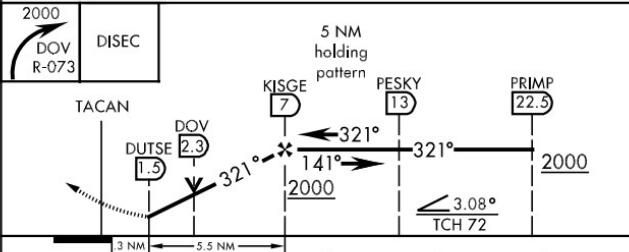
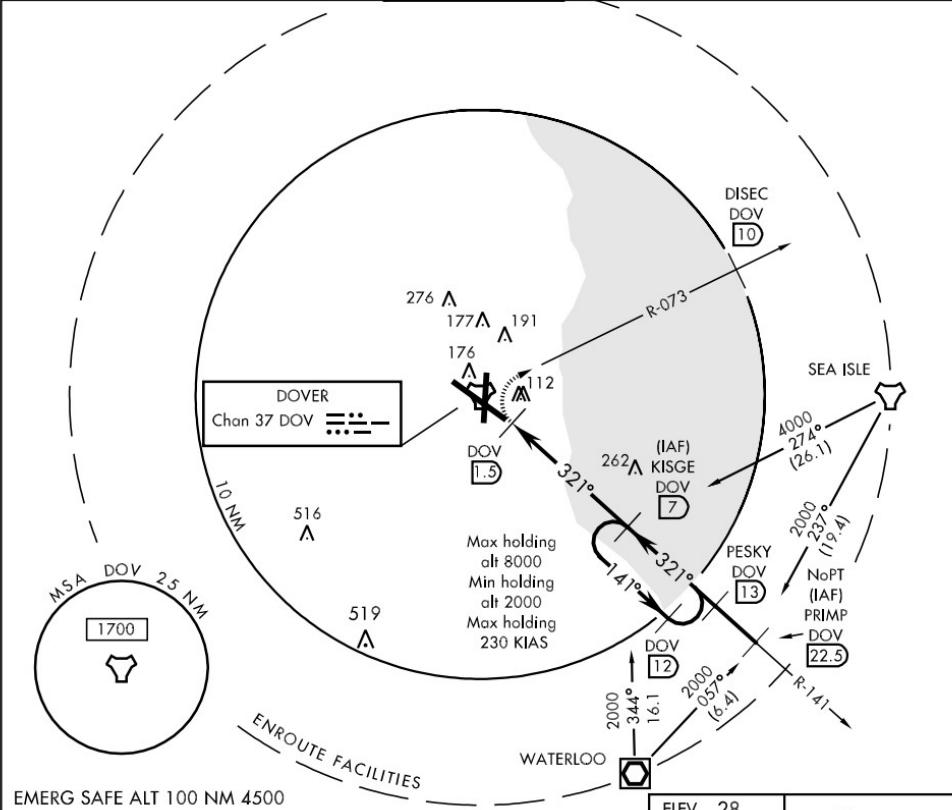
AL-562 [USAF

DOVER AFB (KDOV)

**T** \* Circling not authorized SW of Rwy 1 and 14.

**MISSED APPROACH:** Climbing right turn to 2000, intercept DOV R-073 to DISEC. EFC with ATC.

<b>ATIS</b> <b>135.05</b>	<b>DOVER APP CON</b> <b>132.425</b>	<b>DOVER TOWER</b> <b>126.35</b>	<b>GND CON</b> <b>118.875</b>	<b>CLNC DEL</b> <b>125.55</b>
<b>273.5</b>	<b>257.875</b>	<b>279.625</b>	<b>225.4</b>	<b>289.4</b>



CATEGORY	A	B	C	D	E
S-32	460-1	434 (500-1)	460-1½ 434 (500-1½)	460-1½	434 (500-1½)
CIRCLING *	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032(1100-3)

The diagram illustrates the TDZL/CL system for Runway 14. It shows a runway segment with a TDZL marker (TDZE) at 26° from the centerline. A TDZL/CL marker (TDZL) is located at 138° from the centerline. A REIL marker (REIL) is positioned at 198° from the centerline. The TDZL/CL system includes a TDZL marker (TDZL) at 119° and a TDZL/CL marker (TDZL) at 49°. The TDZL/CL system also features a TDZL marker (TDZL) at 321° to TACAN. A vertical dotted line represents the centerline, and a shaded area indicates the TDZL/CL coverage zone.

DOVER, DELAWARE

VORTAC ENO  
111.4  
Chan 51APCH CRS  
350°  
TDZE  
24  
Apt Elev  
28Rwy Idg 9602  
24  
28

AL-562 [USAF]

VOR/DME RWY 1

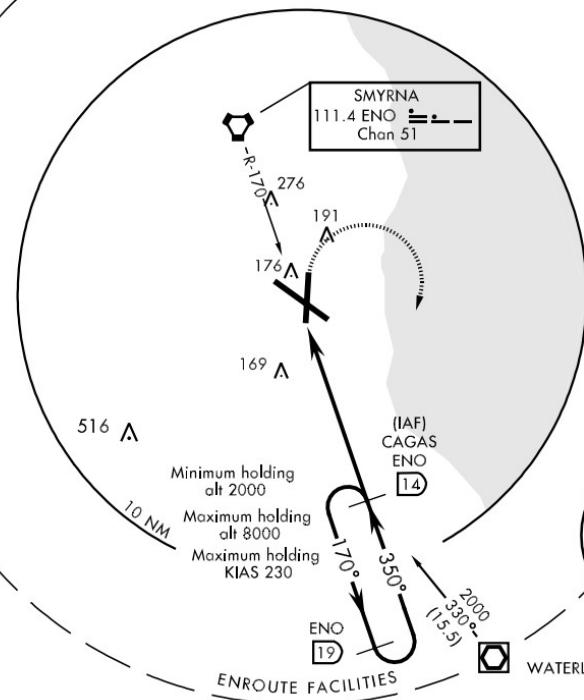
DOVER AFB (KDOV)

▼ \* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,  
 CAT C RVR to 60 and vis to 1 1/4 miles, CAT DE vis to 1 1/2 miles.  
 \*\* Circling not authorized SW of Rwy 1 and 14.

MISSSED APPROACH: Climb to 1100,  
 then climbing right turn to 2000 direct  
 CAGAS and hold.ATIS  
135.05 273.5DOVER APP CON  
132.425 257.875DOVER TOWER  
126.35 279.625GND CON  
118.875 225.4CLNC DEL  
125.55 289.4

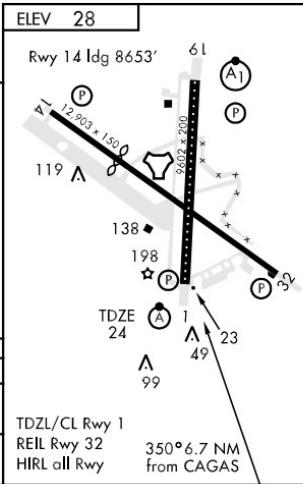
NE-3, 23 SEP 2010 to 21 OCT 2010

NE-3, 23 SEP 2010 to 21 OCT 2010



1100	2000	CAGAS R-170 14
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CAGAS R-170 14	170°	350° 2000
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DOVER, DELAWARE

39°08'N-75°28'W

DOVER AFB (KDOV)

Orig 10042

VOR/DME RWY 1

DOVER, DELAWARE

VOR/DME RWY 32

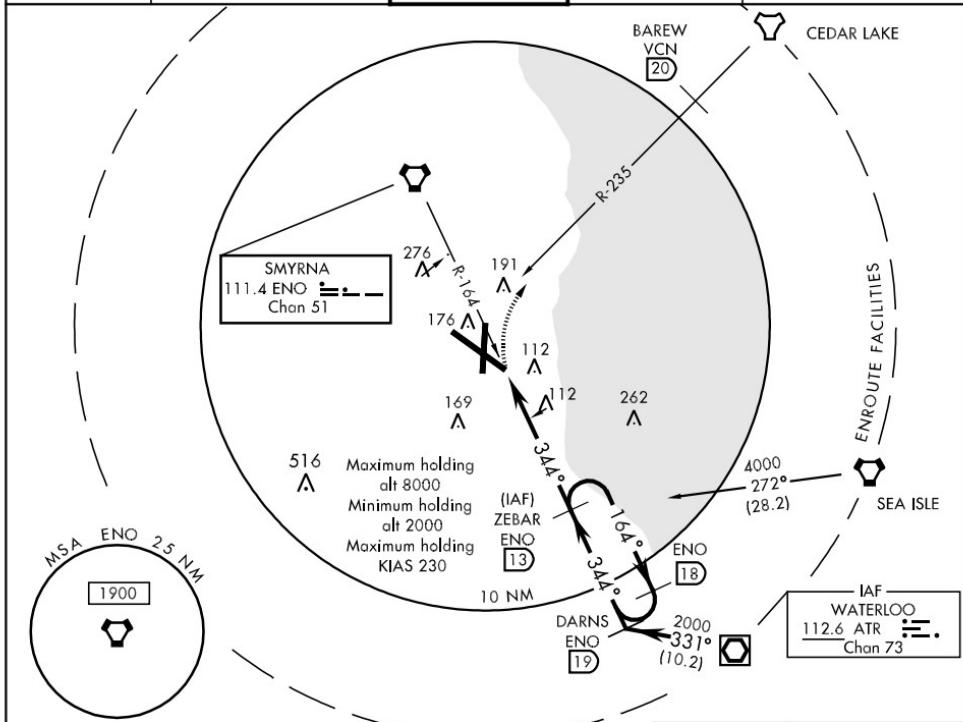
VORTAC ENO  
111.4  
Chan 51APCH CRS  
344°Rwy Idg 12,903  
TDZE 26  
Aptl Elev 28

AL-562 [USAF]

DOVER AFB (KDOV)

▼ \* Circling not authorized SW of Rwy 1 and 14.

MISSIED APPROACH: Climbing right turn to 2000 heading 040° to intercept VCN R-235 to BAREW (VCN R-235/20). Expect further clearance with ATC.

ATIS  
135.05 273.5DOVER APP CON  
132.425 257.875DOVER TOWER  
126.35 279.625GND CON  
118.875 225.4CLNC DEL  
125.55 289.4

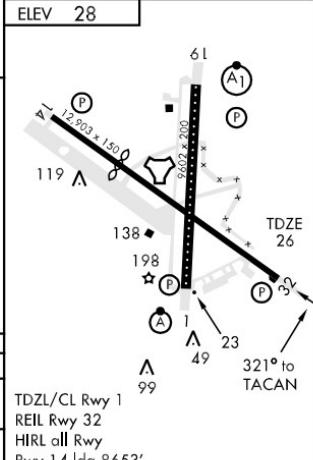
EMERG SAFE ALT 100 NM 4500 FROM "ENO" VORTAC

2000	hdg 040°
BAREW R-235	VCN 20

ZEBAR R-164 (13)  
DARNS R-164 (19)  
2000  
164° → 344° ← 344°  
5 NM Holding pattern

TEMLE 8.0  
8.6  
3.24°  
TCH 72  
0.5 → 5.0 NM

CATEGORY	A	B	C	D	E
S-32	460-1	434 (500-1)	460-1½ 434 (500-1½)	460-1½	434 (500-1½)
CIRCLING *	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032(1100-3)



**DOVER/CHESWOLD****DELAWARE AIRPARK**

(33N) 1 W UTC-5(-4DT) N39°13.10' W75°35.80'  
 56 B FUEL 100LL TPA—912(856) NOTAM FILE MIV  
**RWY 09-27:** H3582X60 (ASPH) S-13, D-18 MIRL 0.3% up W  
 RWY 27: Thld displicd 350'. Antenna.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 09:** TORA-3582 TODA-3582 ASDA-3232 LDA-3232  
**RWY 27:** TORA-3582 TODA-3582 ASDA-3582 LDA-3232

**AIRPORT REMARKS:** Attended 1300–2100Z‡. 24 hr self-service credit card fuel avbl. Uncontrolled vehicular tfc crosses center fld. Deer on and invof arpt. Mowing ops conducted Apr–Oct 1100–1800Z‡. If your acft cannot opr at this arpt due to size or lack of facilities, an alternative is the Dover Civil Air Terminal located at Dover AFB. To use, 72 hr PPR call 302–735–5519. ACTIVATE MIRL Rwy 09–27—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

SMYRNA RCO 122.1R 111.4T (MILLVILLE RADIO)

② DOVER APP/DEP CON 132.425 CLNC DEL 125.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MIV.

SMYRNA (L) VORTAC 111.4 ENO Chan 51 N39°13.90'  
 W75°30.96' 267° 3.8 NM to fld. 10/09W.

**DUPONT** N39°40.69' W75°36.42' NOTAM FILE ILG.

(L) VORTAC 114.0 DQO Chan 87 at New Castle. 70/10W.

WASHINGTON

H-10I, L-34G, A

VOR portion unusable:

025°–039° byd 5 NM blo 10,000'	265°–275° byd 30 NM blo 8000'
025°–039° byd 25 NM	300°–315° byd 35 NM blo 3000'
040°–120° byd 25 NM blo 4000'	355°–005° blo 3000'
125°–225° blo 10000'	355°–005° byd 15 NM blo 4000'
225°–230° byd 15 NM blo 3000'	355°–005° byd 25 NM
230°–265° byd 22 NM	

DME portion unusable:

040°–100° byd 25 NM blo 5000'	265°–275° byd 30 NM blo 5000'
210°–235° byd 30 NM blo 3000'	310°–320° byd 35 NM blo 4000'
235°–265° byd 22 NM	

RCO 122.1R 114.0T (MILLVILLE RADIO)

**FARMINGTON****CHORMAN**

(D74) 2 SW UTC-5(-4DT) N38°50.97' W75°36.77'

WASHINGTON

L-34F, 36J, A

66 B S4 NOTAM FILE MIV

**RWY 16-34:** H3588X37 (ASPH) LIRL

RWY 16: REIL. TRCV (TRIL). Trees. RWY 34: REIL. TRCV (TRIL). Sign.

**AIRPORT REMARKS:** Attended Mon–Fri 1300Z‡–dusk. Agriculture spraying activity on and invof arpt. Rwy 16–34 large unsealed surface cracks, alligator patches. Loading pad adjacent to east side Rwy 34. For rotating bcn call 302–349–5055 or 645–9225. For LIRL Rwy 16–34 and REIL Rwy 16 and Rwy 34 call 302–349–5055 or 645–9225.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MIV.

WATERLOO (L) VOR/DME 112.6 ATR Chan 73 N38°48.59' W75°12.68' 286° 19 NM to fld. 5/09W.

**FELTON****HENDERSON AVIATION**

(ØN6) 2 NE UTC-5(-4DT) N39°00.77' W75°32.04'

WASHINGTON

50 S4 NOTAM FILE MIV

**RWY 15-33:** 2048X40 (TURF)

RWY 15: Building. RWY 33: Trees.

**AIRPORT REMARKS:** Attended Mon–Fri 1300–2200Z‡.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

APP CRS <b>085°</b>	Rwy Idg <b>3232</b>
TDZE	<b>55</b>
Apt Elev	<b>55</b>

# RNAV (GPS) RWY 9

DOVER/ DELAWARE AIRPARK (33N)

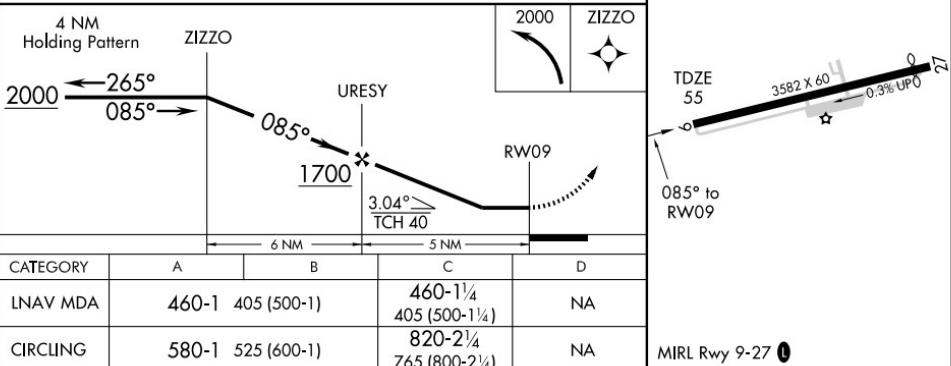
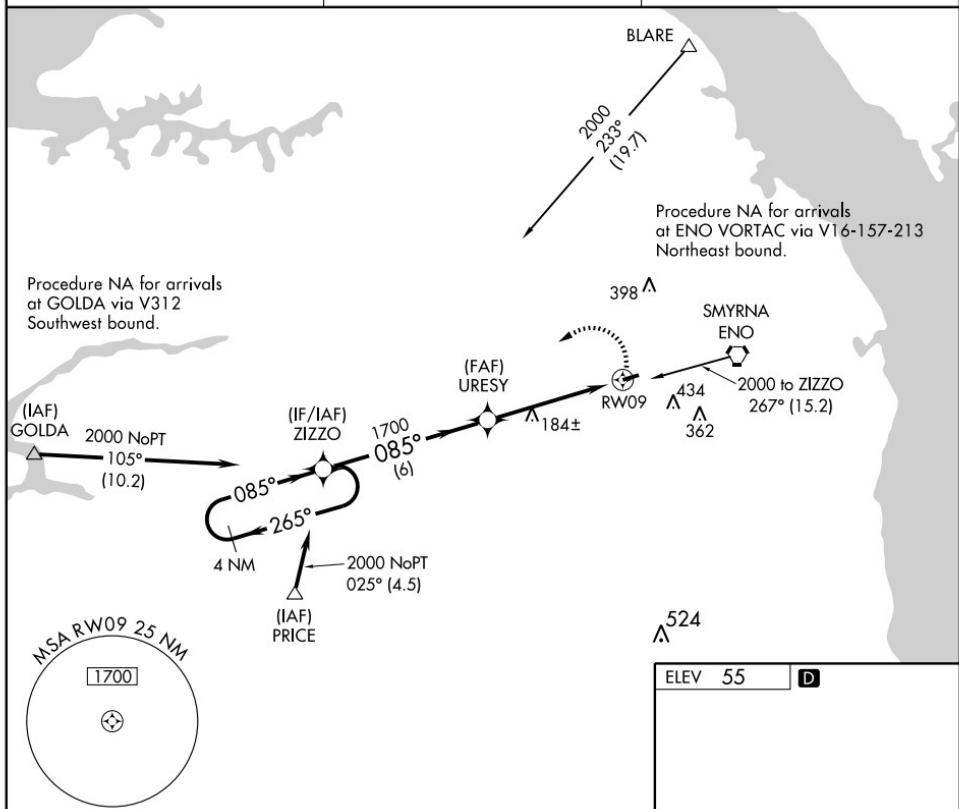
**V** Use Dover AFB altimeter setting.  
**NA** DME/DME RNP-0.3 NA.  
 Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 2000 direct ZIZZO and hold.

DOVER APP CON  
**132.425 257.875**

CLNC DEL  
**125.55**

UNICOM  
**123.0 (CTAF)**





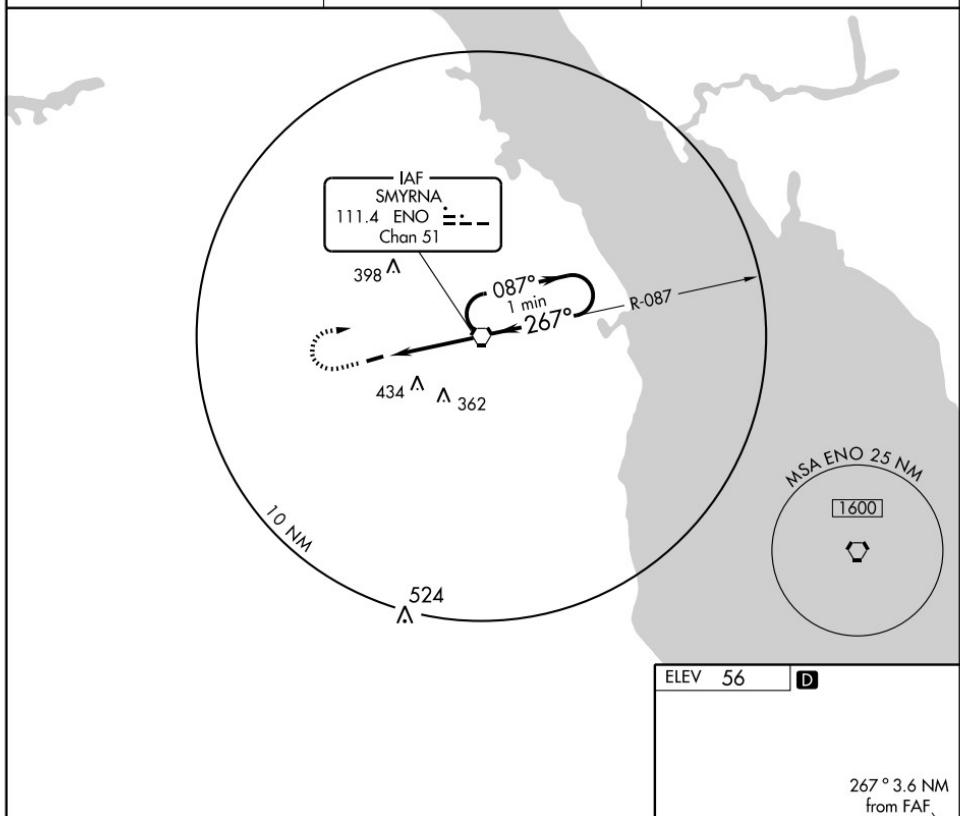
VORTAC ENO	APP CRS	Rwy Idg	<b>3232</b>
<b>111.4</b>	<b>267°</b>	TDZE	<b>55</b>
Chan 51		Apt Elev	<b>56</b>

V	Use Dover AFB altimeter setting.
NA	

**VOR RWY 27**

DOVER/ DELAWARE AIRPARK (33N)

MISSSED APPROACH: Climb to 1000 then climbing right turn to 1500 direct to ENO VORTAC and hold.

DOVER APP CON  
**132.425 257.875**CLNC DEL  
**125.55**UNICOM  
**123.0 (CTAF) 0**

ELEV 56 D

267° 3.6 NM from FAF  
3582 X 60 0.5% UP 0 TDZE 55

MIRL Rwy 9-27 0

FAF to MAP 3.6 NM

Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

# DELAWARE

## GEORGETOWN

SUSSEX CO

(GED) 2 SE UTC-5(-4DT) N38°41.27' W75°21.50'

53 B S4 FUEL 100LL, JET A NOTAM FILE GED

RWY 04-22: H5000X150 (ASPH-GRVD) MIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 10-28: H3109X75 (ASPH) MIRL

RWY 10: REIL. RWY 28: REIL.

**AIRPORT REMARKS:** Attended 1200-0200Z‡. Parachute Jumping. PAEW within safety area of all rwys and twys. ACTIVATE MIRL Rwy 04-22 and 10-28 and REIL Rwy 04, Rwy 22, Rwy 10 and Rwy 28—CTAF.

**WEATHER DATA SOURCES:** ASOS 118.375 (302) 856-2927.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

WATERLOO RCO 122.1R 112.6T (MILLVILLE RADIO)

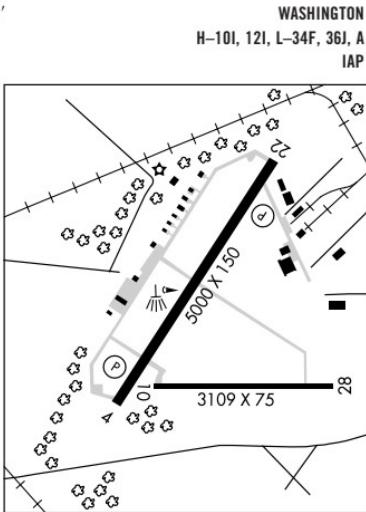
② DOVER APP/DEP CON 132.425

GCO 125.55 (DOVER CLNC), OTS indef.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MIV.

WATERLOO (L) VOR/DME 112.6 ATR Chan 73 N38°48.59'

W75°12.68' 232° 10.1 NM to fld. 5/09W.



HADIN N39°34.87' W75°36.83' NOTAM FILE ILG.

NDB (LOM) 248 IL 013° 5.9 NM to New Castle.

WASHINGTON

L-34G

HENDERSON AVIATION (See FELTON)

JENKINS (See WYOMING)

LAUREL (N06) 1 SW UTC-5(-4DT) N38°32.53' W75°35.66'

30 B S4 NOTAM FILE MIV

RWY 15-33: 3175X270 (TURF) LIRL

RWY 15: REIL. TRCV (TRIL) Trees.

RWY 33: TRCV (TRIL) Thld dsplcd 270'. Road.

**AIRPORT REMARKS:** Attended 1300Z‡-dusk. Parachute Jumping.

Significant sky-diving operation seasonal to all but winter months.

Rwy 33 dsplcd thld marked with 3 large orange cones each side.

Rwy 15 TRCV calibration unconfirmed. Rwy 33 TRCV calibration

unconfirmed. ACTIVATE LIRL Rwy 15-33 and REIL Rwy 33 and

rotating bcn—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

PATUXENT APP/DEP CON 127.95 (Mon-Fri 1200-0400Z‡, Sat-Sun 1300-2300Z‡, clsd holidays)

② WASHINGTON CENTER APP/DEP CON 132.05 (Mon-Fri 0400-1200Z‡,

Sat-Sun 2300-1300Z‡)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SBY.

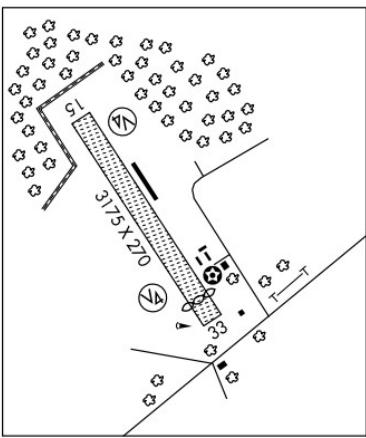
SALISBURY (L) VORTAC 111.2 SBY Chan 49 N38°20.70'

W75°30.64' 354° 12.5 NM to fld. 50/12W.

WASHINGTON

L-34F, 36J, A

IAP



WAAS CH <b>65621</b> <b>W04A</b>	APP CRS <b>045°</b>	Rwy Idg <b>5000</b> TDZE <b>50</b> Apt Elev <b>50</b>
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# RNAV (GPS) RWY 4

GEORGETOWN / SUSSEX COUNTY (GED)

**T** DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F). If local altimeter setting not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Salisbury-Ocean City Wicomico Rgnl altimeter setting.

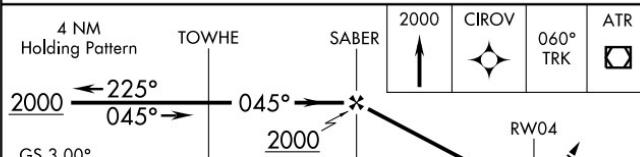
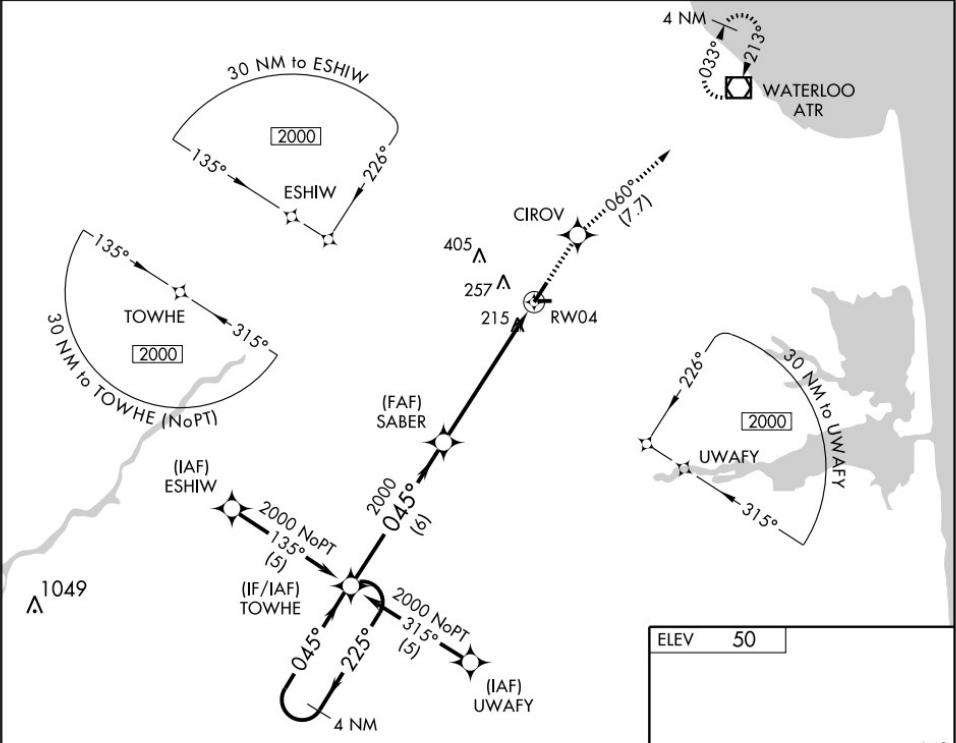
MISSED APPROACH: Climb to 2000 direct CIROV and via 060° track to ATR VOR/DME and hold.

ASOS  
**118.375**

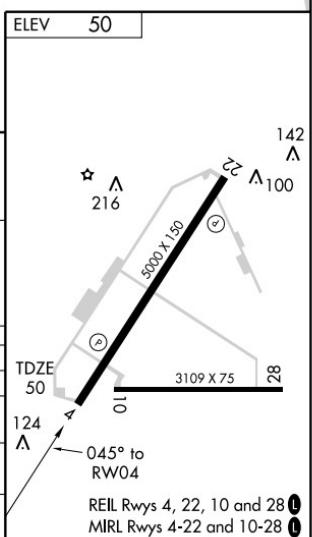
DOVER APP CON  
**132.425 257.875**

CLNC DEL  
**125.55**

UNICOM  
**123.0 (CTAF)**



CATEGORY	A	B	C	D	
LPV DA		470-1½	420 (500-1½)		
LNAV/ VNAV DA		520-1¾	470 (500-1¾)		
LNAV MDA	480-1	430 (500-1)	480-1¼ 430 (500-1¼)	480-1½ 430 (500-1½)	
CIRLING	560-1¾	510 (600-1¾)	600-1¾ 550 (600-1¾)	600-2 550 (600-2)	



## RNAV (GPS) RWY 22

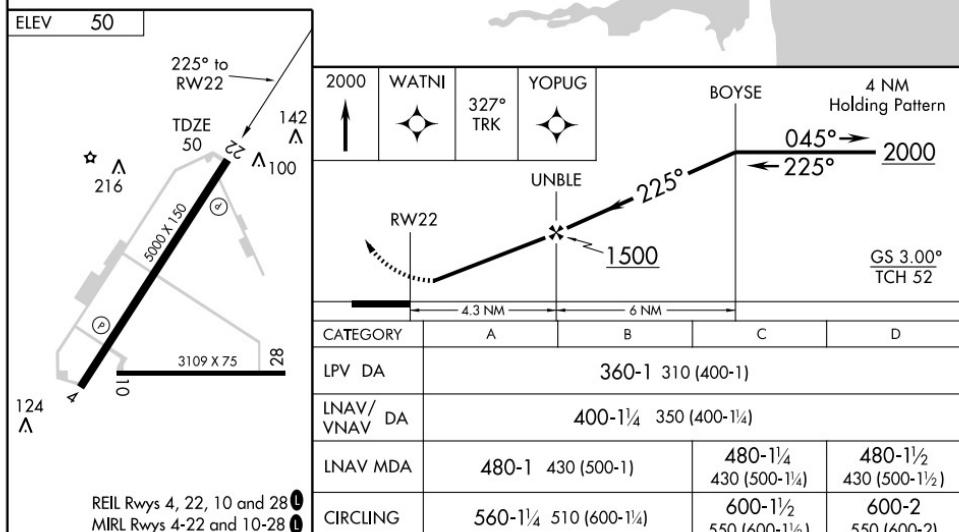
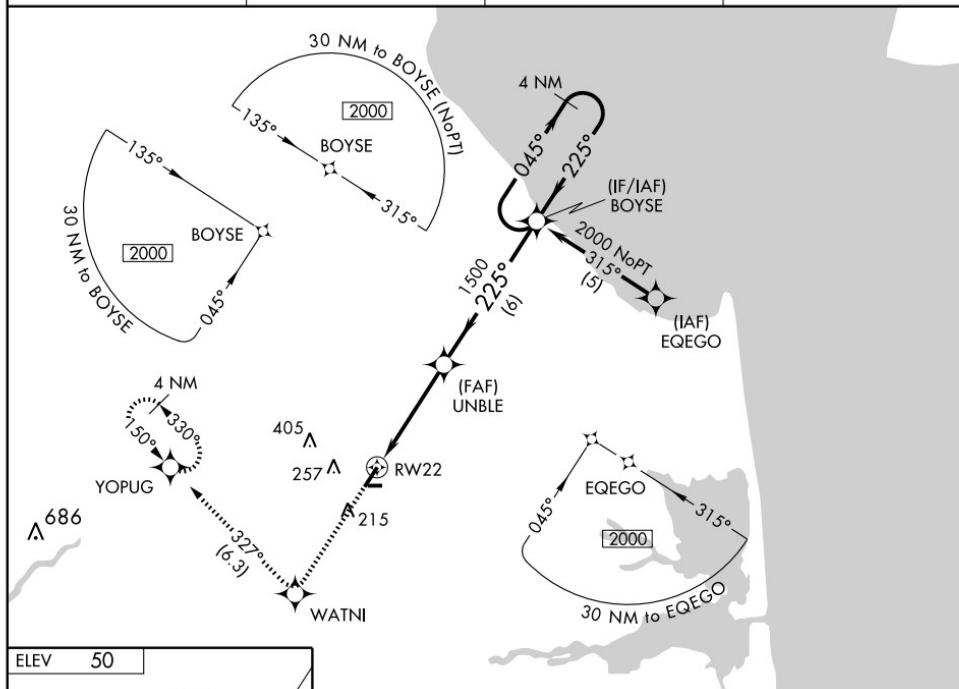
GEORGETOWN / SUSSEX COUNTY (GED)

WAAS CH <b>60921</b> <b>W22A</b>	APP CRS <b>225°</b>	Rwy Idg <b>5000</b> TDZE <b>50</b> Apt Elev <b>50</b>
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**T** DME/DME RNP-0.3 NA below -15°C (56°F). If local altimeter setting not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Salisbury-Ocean City Wicomico Rgnl altimeter setting.

**MISSED APPROACH:** Climb to 2000 direct WATNI and via 327° track to YOPUG and hold.

ASOS <b>118.375</b>	DOVER APP CON <b>132.425</b> <b>257.875</b>	CLNC DEL <b>125.55</b>	UNICOM <b>123.0</b> (CTAF)
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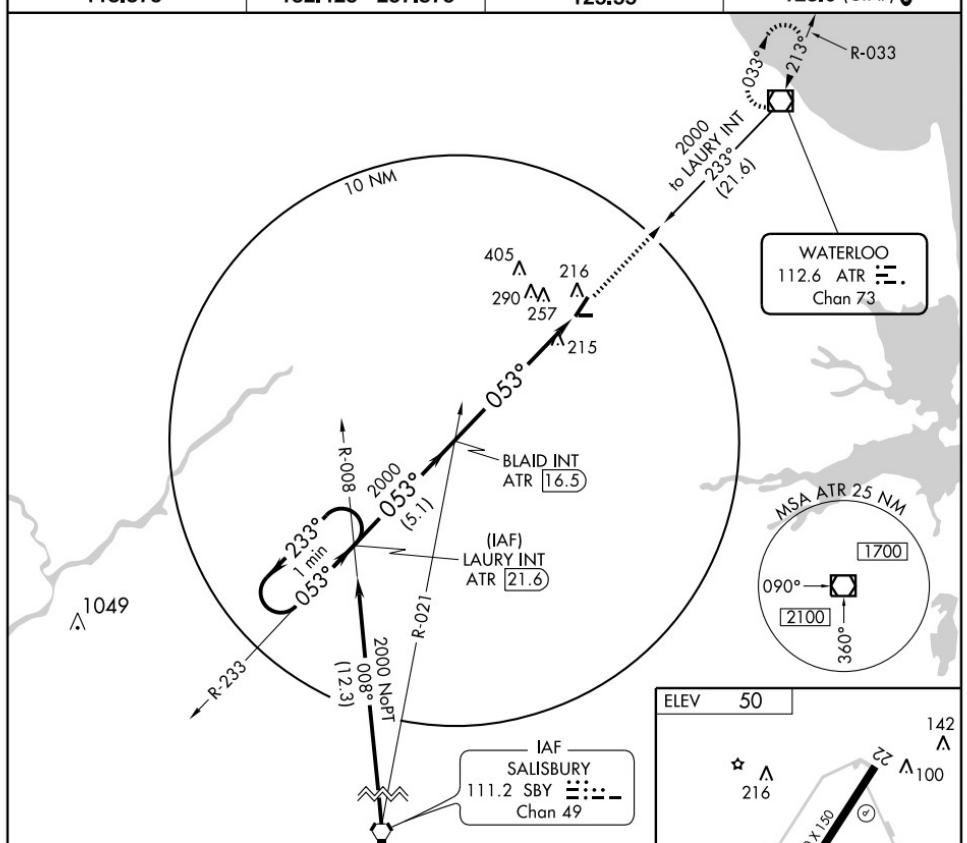


VOR/DME ATR <b>112.6</b> Chan 73	APP CRS <b>053°</b>	Rwy Idg <b>5000</b> TDZE <b>50</b> Apt Elev <b>50</b>
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MISSIED APPROACH: Climb to 2000  
direct to ATR VOR/DME and hold.

ASOS <b>118.375</b>	DOVER APP CON <b>132.425</b> <b>257.875</b>	CNLC DEL <b>125.55</b>	UNICOM <b>123.0 (CTAF)</b> <b>0</b>
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One Minute Holding Pattern	LAURY INT ATR [21.6]	BLAID INT ATR [16.5]	2000 ATR 112.6
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2000	233°	053°	2000
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2.96° TCH 45	5.1 NM	6.1 NM
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CATEGORY	A	B	C	D
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S-4	520-1 470 (500-1)	520-1 1/4 470 (500-1 1/4)	520-1 1/2 470 (500-1 1/2)
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CIRCLING	580-1 530 (600-1)	600-1 1/2 550 (600-1 1/2)	600-2 550 (600-2)
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VOR/DME ATR  
112.6  
Chan 73

APP CRS  
234°

Rwy Idg 5000  
TDZE 50  
Apt Elev 50

## VOR RWY 22

GEORGETOWN / SUSSEX COUNTY (GED)



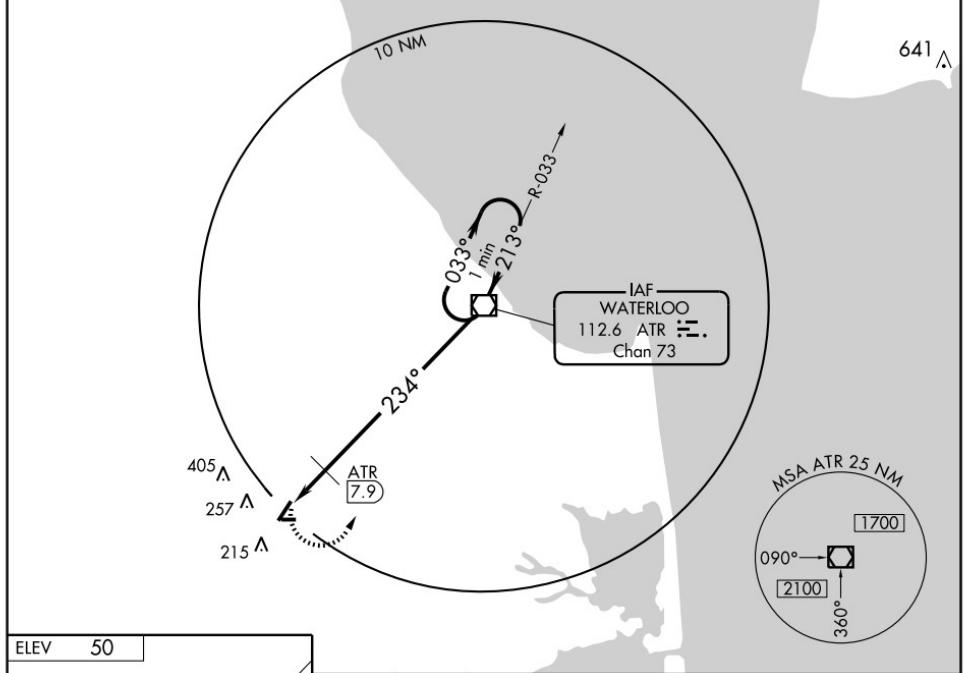
ASOS  
118.375

DOVER APP CON  
132.425 257.875

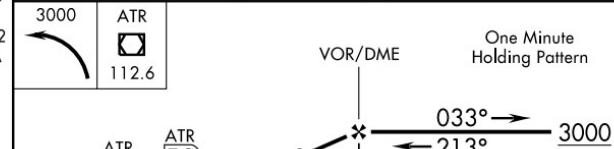
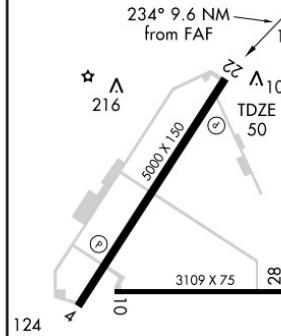
CLNC DEL  
125.55

UNICOM  
123.0 (CTAF) 0

MISSSED APPROACH: Climbing left turn  
to 3000 direct ATR VOR/DME and hold.



ELEV 50



CATEGORY	A	B	C	D
S-22	620-1 570 (600-1)		620-1½ 570 (600-1½)	620-1¾ 570 (600-1¾)
CIRCLING	620-1 570 (600-1)		620-1½ 570 (600-1½)	620-2 570 (600-2)

DME MINIMUMS				
S-22	440-1 390 (400-1)		440-1¼ 390 (400-1¼)	
CIRCLING	580-1 530 (600-1)		600-1½ 550 (600-1½)	600-2 550 (600-2)

# DELAWARE

## GEORGETOWN

SUSSEX CO

(GED) 2 SE UTC-5(-4DT) N38°41.27' W75°21.50'

53 B S4 FUEL 100LL, JET A NOTAM FILE GED

RWY 04-22: H5000X150 (ASPH-GRVD) MIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 10-28: H3109X75 (ASPH) MIRL

RWY 10: REIL. RWY 28: REIL.

AIRPORT REMARKS: Attended 1200-0200Z‡. Parachute Jumping. PAEW

within safety area of all rwys and twys. ACTIVATE MIRL Rwy

04-22 and 10-28 and REIL Rwy 04, Rwy 22, Rwy 10 and Rwy

28—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (302) 856-2927.

COMMUNICATIONS: CTAF/UNICOM 123.0

WATERLOO RCO 122.1R 112.6T (MILLVILLE RADIO)

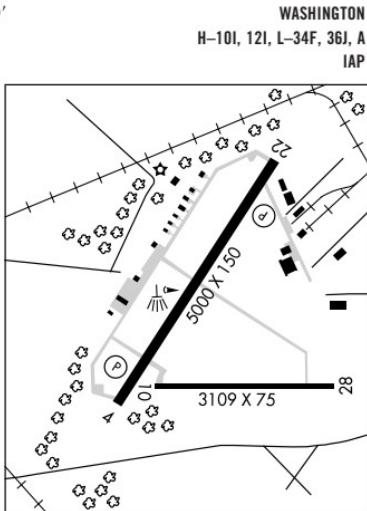
⑧ DOVER APP/DEP CON 132.425

GCO 125.55 (DOVER CLNC), OTS indef.

RADIO AIDS TO NAVIGATION: NOTAM FILE MIV.

WATERLOO (L) VOR/DME 112.6 ATR Chan 73 N38°48.59'

W75°12.68' 232° 10.1 NM to fld. 5/09W.



HADIN N39°34.87' W75°36.83' NOTAM FILE ILG.

NDB (LOM) 248 IL 013° 5.9 NM to New Castle.

WASHINGTON

L-34G

HENDERSON AVIATION (See FELTON)

JENKINS (See WYOMING)

LAUREL (N06) 1 SW UTC-5(-4DT) N38°32.53' W75°35.66'

30 B S4 NOTAM FILE MIV

RWY 15-33: 3175X270 (TURF) LIRL

RWY 15: REIL. TRCV (TRIL) Trees.

RWY 33: TRCV (TRIL) Thld dsplcd 270'. Road.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Parachute Jumping.

Significant sky-diving operation seasonal to all but winter months.

Rwy 33 dsplcd thld marked with 3 large orange cones each side.

Rwy 15 TRCV calibration unconfirmed. Rwy 33 TRCV calibration

unconfirmed. ACTIVATE LIRL Rwy 15-33 and REIL Rwy 33 and

rotating bcn—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

PATUXENT APP/DEP CON 127.95 (Mon-Fri 1200-0400Z‡, Sat-Sun  
1300-2300Z‡, clsd holidays)

⑧ WASHINGTON CENTER APP/DEP CON 132.05 (Mon-Fri 0400-1200Z‡,  
Sat-Sun 2300-1300Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE SBY.

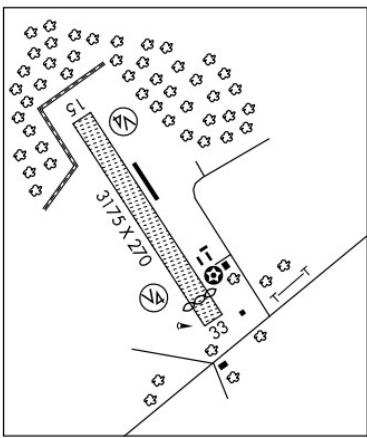
SALISBURY (L) VORTAC 111.2 SBY Chan 49 N38°20.70'

W75°30.64' 354° 12.5 NM to fld. 50/12W.

WASHINGTON

L-34F, 36J, A

IAP



GPS-A  
LAUREL (Nº6)

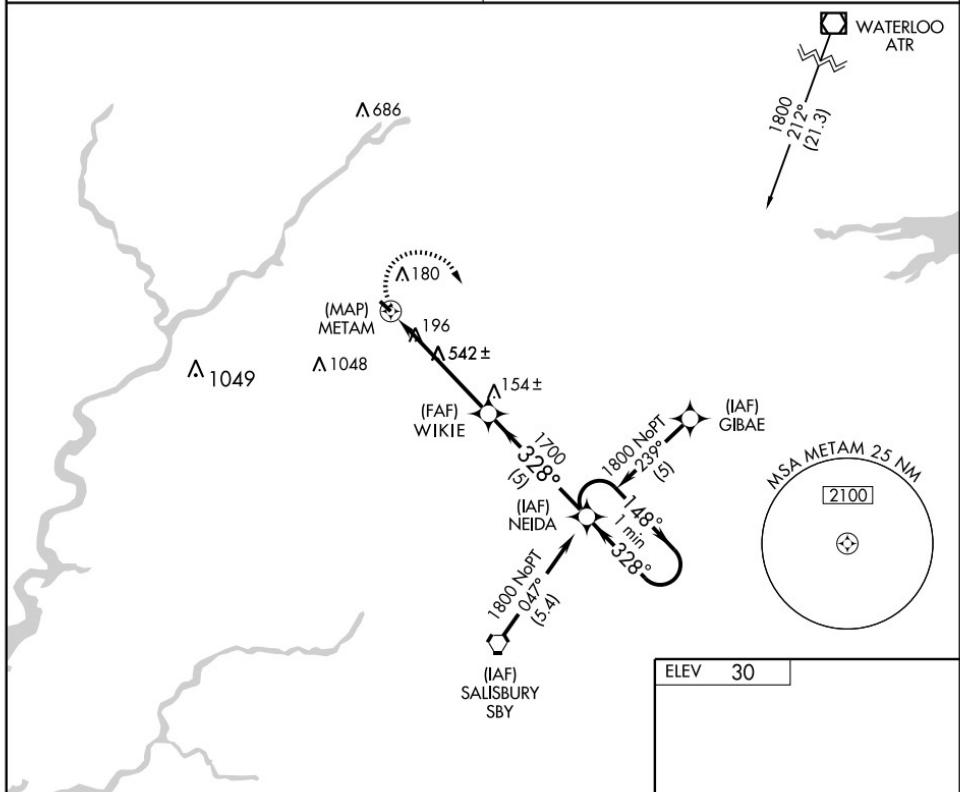
APP CRS <b>328°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>30</b>
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**T** Obtain Salisbury altimeter setting on CTAF (122.8);  
**A NA** when not received, use Patuxent River NAS  
altimeter setting. Procedure not authorized at night.

MISSED APPROACH: Climbing right turn to 1800 direct NEIDA WP and hold.

PATUXENT APP CON★  
127.95 314.0

UNICOM  
122.8 (CTAF) 



1800 NEIDA

Holding Pattern

NEIDA

WIKIE

METAM

1700

328°

148°

328°

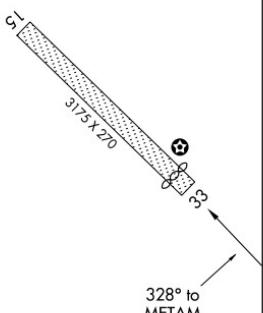
1800

CATEGORY	A	B	C	D
CIRCLING	880-1 850 (900-1)	880-1 1/4 850 (900-1 1/4)		NA

PATUXENT RIVER NAD ALTIMETER SETTING MINIMUMS

CIRCUIT 810-11½ 810 (1000 1½) NA

LIRL Rwy 15-33 L  
REIL Rwy 15  
REIL Rwy 33 L



**MIDDLETOWN**

**SUMMIT** (EVY) 5 N UTC-5(-4DT) N39°31.26' W75°43.42'  
 70 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE MIV  
**RWY 17-35:** H4488X65 (ASPH) MIRL  
 RWY 17: REIL. PAPI(P4R). **RWY 35:** REIL. PAPI(P4L).  
**RWY 11-29:** 3601X200 (TURF) LIRL  
 RWY 11: REIL. **RWY 29:** REIL.

**AIRPORT REMARKS:** Attended 1200-0000Z. Extensive medium/heavy helicopter training in progress all hrs on and invof arpt; high rotor downwash velocities. When CH47 helicopters opr, req advisories on UNICOM. S end of parking ramp and mid-field twy clsd. ACTIVATE LIRL and REIL Rwy 11-29—123.5.

**WEATHER DATA SOURCES:** AWOS-3 132.325 (302) 378-2063.

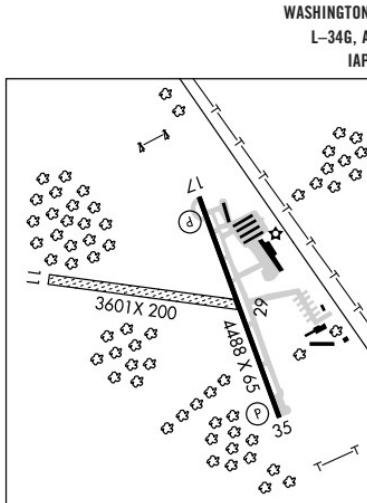
**COMMUNICATIONS:** CTAF/UNICOM 122.725

(R) PHILADELPHIA APP/DEP CON 118.35 CLNC DEL 125.3 TF  
 800-354-9884

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ILG.

DUPONT (L) VORTAC 114.0 DQO Chan 87 N39°40.69'  
 W75°36.42' 220° 10.9 NM to fld. 70/10W.

HADIN NDB (LOM) 248 IL N39°34.87' W75°36.83' 245° 6.2  
 NM to fld.

**NEW CASTLE**

(See WILMINGTON)

**SMYRNA** N39°13.90' W75°30.96' NOTAM FILE MIV.

(L) VORTAC 111.4 ENO Chan 51 267° 3.8 NM to Delaware Airpark. 10/09W.

WASHINGTON

H-10I, L-34F, A

TACAN azimuth and DME unusable:

140°-150° byd 36 NM blo 2000'

200°-300° byd 36 NM blo 3000'

RCO 122.1R 111.4T (MILLVILLE RADIO)

**SMYRNA** (38N) 1 E UTC-5(-4DT) N39°18.22' W75°35.03'

18 B FUEL 100LL, MOGAS TPA—818(800) NOTAM FILE MIV

**RWY 10-28:** 2600X125 (TURF) LIRL

WASHINGTON

RWY 10: REIL. TRCV(TRIL). Trees. **RWY 28:** REIL. TRCV(TRIL). Trees.

**AIRPORT REMARKS:** Attended irregularly. Arpt lghts opr dusk—0500Z. ACTIVATE LIRL Rwy 10-28—CTAF. Migratory water fowl on and in vicinity of arpt Oct-Feb. Rwy 10-28 rolling surface.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**SUMMIT**

(See MIDDLETOWN)

**SUSSEX CO**

(See GEORGETOWN)

**WATERLOO** N38°48.59' W75°12.68' NOTAM FILE MIV.

(L) VOR/DME 112.6 ATR Chan 73 233° 10.0 NM to Sussex Co. 5/09W.

WASHINGTON

H-10I, L-34F, 36I, A

DME portion unusable 179°-293° beyond 30 NM below 2000', 294°-330° inside 10 NM.

RCO 122.1R 112.6T (MILLVILLE RADIO)



# RNAV (GPS) RWY 17

MIDDLETOWN / SUMMIT (EVY)

WAAS CH 49002 W17A	APP CRS 175°	Rwy Idg TDZE Apt Elev	<b>4488</b> 70 70
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MISSIED APPROACH: Climb to 2000 direct WENDS and hold.

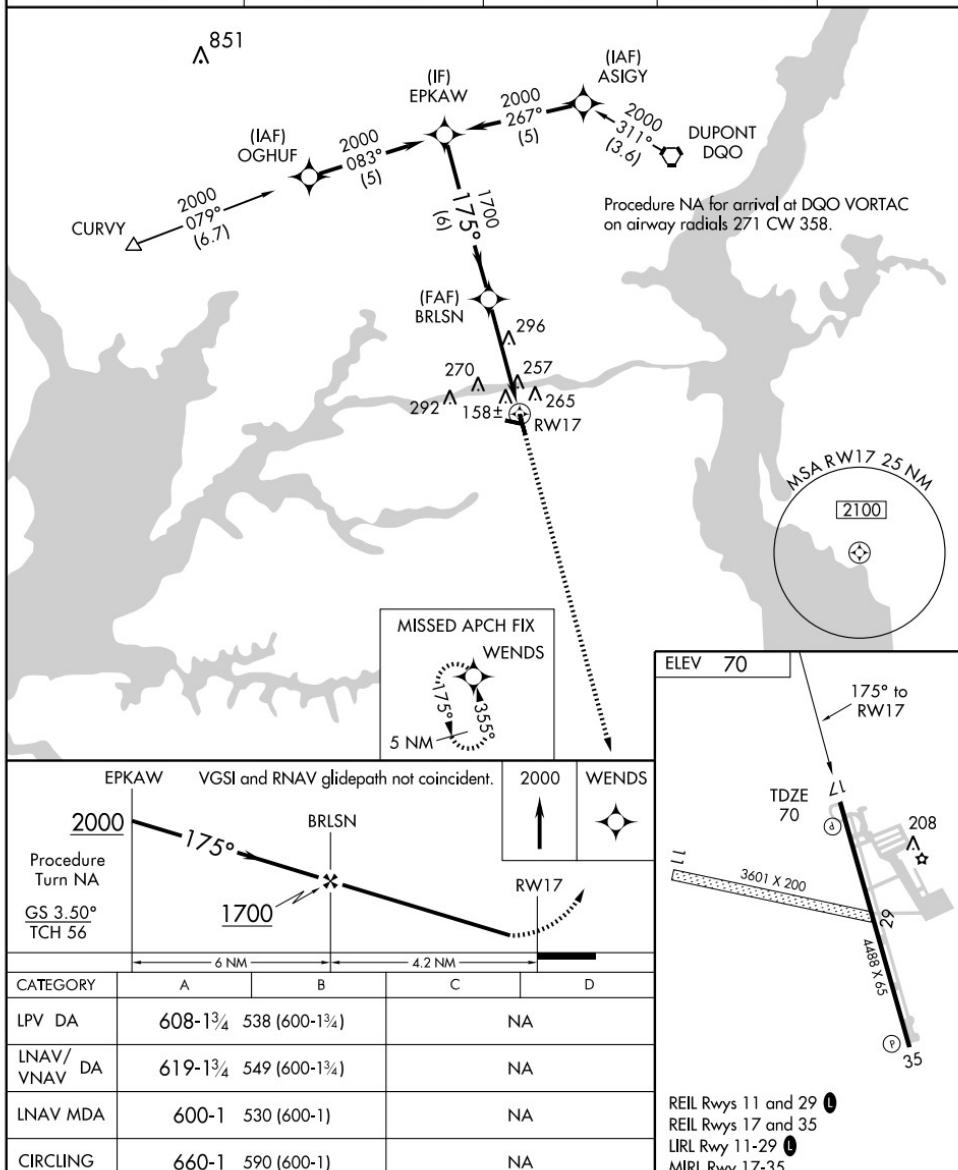
AWOS-3  
**132.325**

PHILADELPHIA APP CON  
**118.35 323.1**

CLNC DEL  
**125.3**

UNICOM  
**122.725 (CTAF)**

**123.5** 0



## RNAV (GPS) RWY 35

MIDDLETOWN / SUMMIT (EVY)

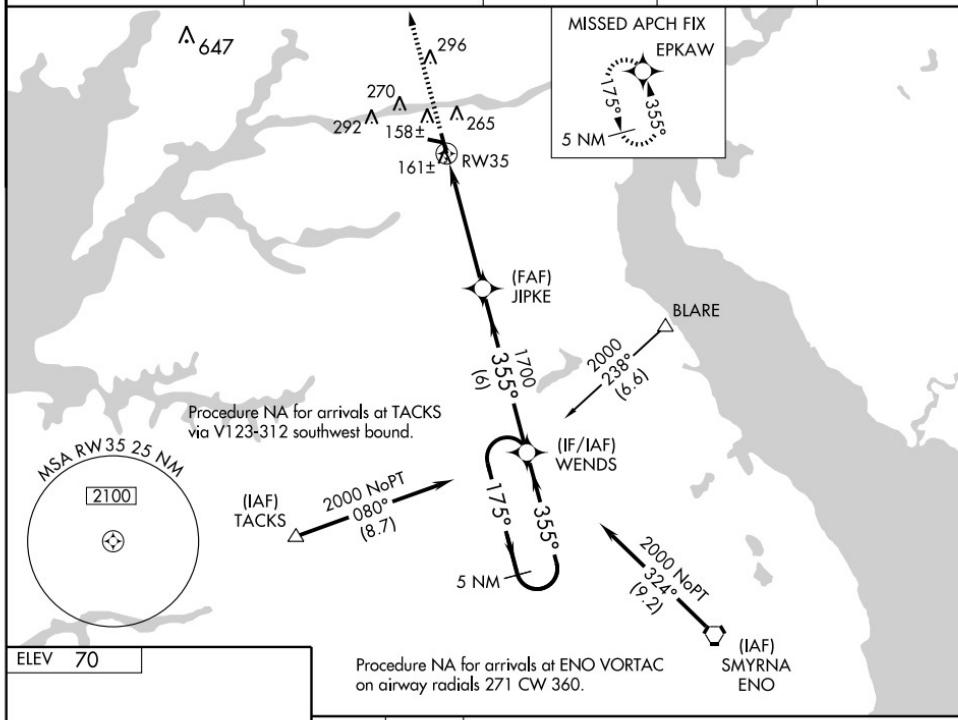
WAAS CH 40302 W35A	APP CRS 355°	Rwy Idg TDZE Apt Elev	4488 70 70
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▼ Circling to Rwy 11, 29, 17 NA at night. If local altimeter setting not received, use Wilmington altimeter setting and increase all DAs/MDAs 40 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Wilmington altimeter setting.

MISSIED APPROACH:  
Climb to 2000 direct EPKAW and hold.

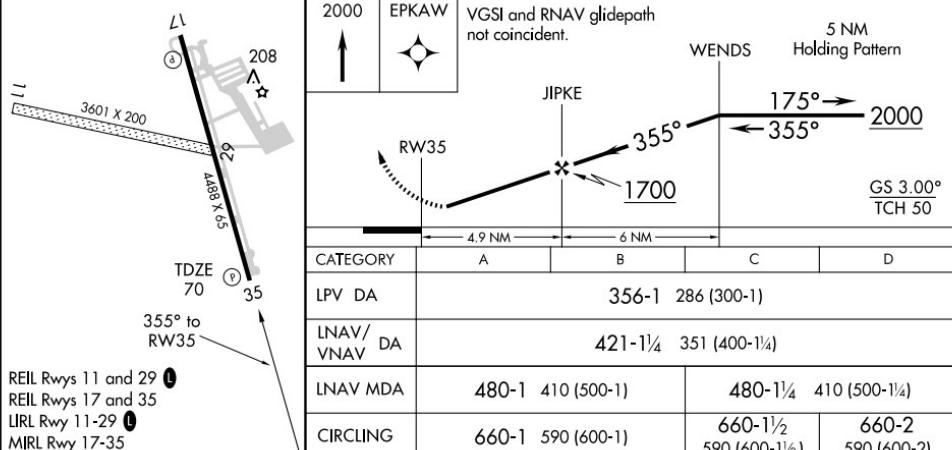
AWOS-3  
132.325PHILADELPHIA APP CON  
118.35 323.1CLNC DEL  
125.3UNICOM  
122.725 (CTAF)

123.5 1



ELEV 70

Procedure NA for arrivals at ENO VORTAC on airway radials 271 CW 360.



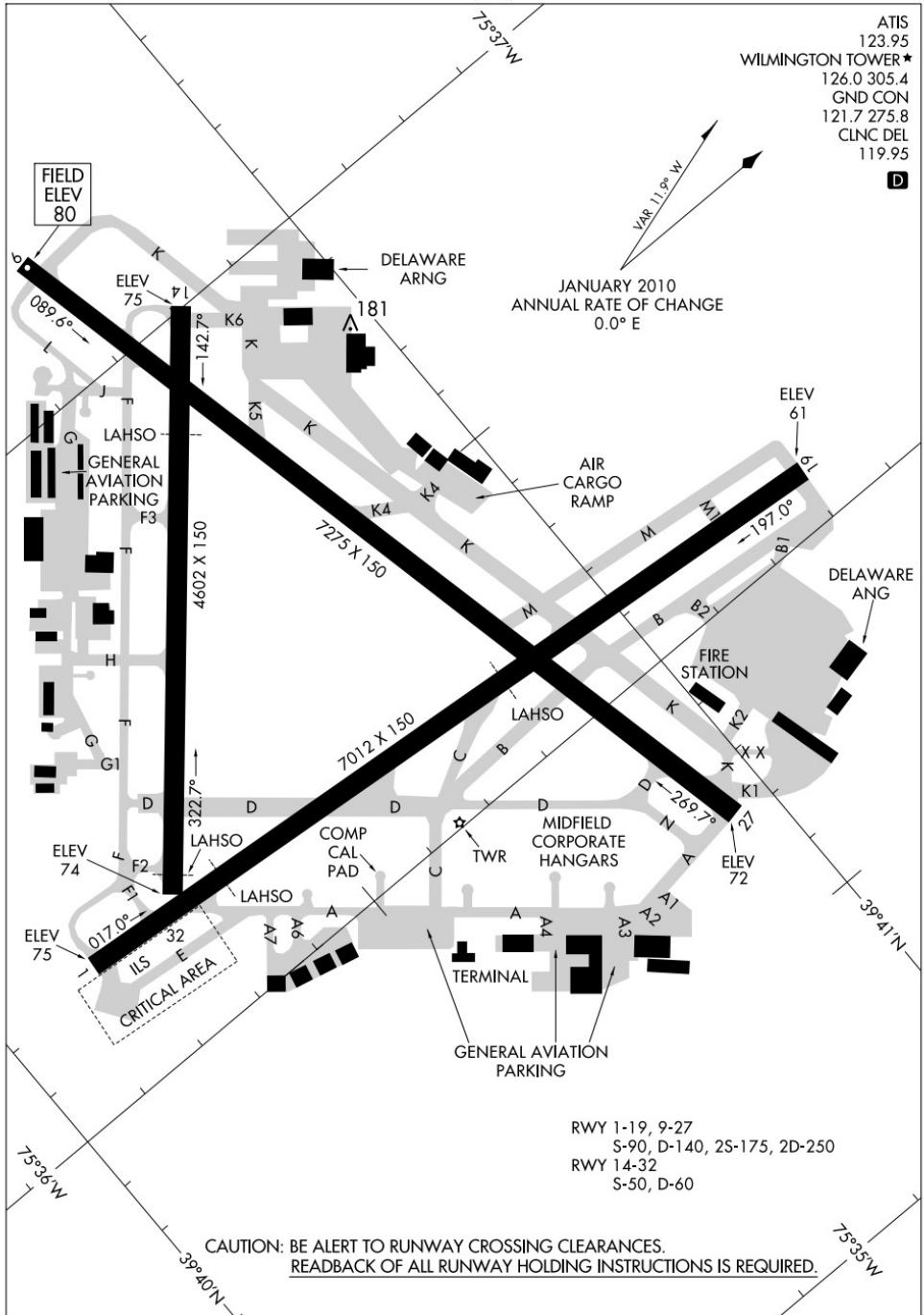
10210

## AIRPORT DIAGRAM

AL-458 (FAA)

WILMINGTON/ NEW CASTLE (ILG)  
WILMINGTON, DELAWARE

ATIS  
123.95  
WILMINGTON TOWER★  
126.0 305.4  
GND CON  
121.7 275.8  
CLNC DEL  
119.95  
**D**



AIRPORT DIAGRAM

10210

WILMINGTON, DELAWARE  
WILMINGTON/ NEW CASTLE (ILG)

**WILMINGTON****NEW CASTLE**

(ILG) 4 S UTC-5(-4DT) N39°40.72' W75°36.40'

80 B S4 FUEL 100LL, JET A, OX 1, 2, 3, 4 LRA Class I, ARFF Index B  
NOTAM FILE ILGRWY 09-27: H7275X150 (ASPH-GRVD) S-90, D-140, 2S-175,  
2D-250 HIRL

RWY 09: PAPI(P4L)—GA 3.0° TCH 55'. Trees.

RWY 27: VASI(V4L)—GA 3.0°TCH 51'. Trees.

RWY 01-19: H7012X150 (ASPH-GRVD) S-90, D-140, 2S-175,

2D-250 HIRL

RWY 01: MALSR. Road.

RWY 19: REIL. PAPI(P4L)—GA 3.0°TCH 55'. Trees.

RWY 14-32: H4602X150 (ASPH) S-50, D-60 MIRL

RWY 14: Trees. RWY 32: VASI(V4L)—GA 3.0°TCH 27'.

**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 01	09-27	4050
RWY 14	01-19	4450
RWY 19	14-32	5750
RWY 32	09-27	3600

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 01: TORA-7012 TODA-7012 ASDA-7012 LDA-7012

RWY 09: TORA-7000 TODA-7275 ASDA-7000 LDA-7000

RWY 14: TORA-4603 TODA-4603 ASDA-4603 LDA-4603

RWY 19: TORA-7012 TODA-7012 ASDA-7012 LDA-7012

RWY 27: TORA-7000 TODA-7275 ASDA-7000 LDA-7000

RWY 32: TORA-4603 TODA-4603 ASDA-4603 LDA-4603

**AIRPORT REMARKS:** Attended continuously. Birds on and invof arpt. Rwy 09-27 no touch and go ldg for turbo jet 0400-1200Z‡. When twr clsd, pilots must announce intentions over CTAF before ldgs; tkf or ground travel on rwy's and twys. When twr clsd announce emergencies on CTAF directly to ARFF station. Rwy 14-32 NSTD military assault landing zone (ALZ) lighting. Rwy 14-32 CLOSED to air carrier aircraft ops. Ctc FBO's for overngt parking; extended svcs. When terminal building clsd 0400-1100Z‡ contact arpt ops department on 126.0 or 302-229-6315 (24 hr cell). Private gnd vehicles cross Twy A between Twy A4 and Twy C. Twy G section between Twy H and Twy J limited to acft with wingspan of 79 ft or less. Twy G section between Twy H and Twy D limited to acft with wingspan of 49 ft or less. When twr clsd ACTIVATE HIRL Rwy 01-19, Rwy 09-27, MIRL Rwy 14-32, PAPI Rwy 09, Rwy 19, Rwy 27 and twy lgts—CTAF. Ldg fee for all acft over 7,500 pounds except federal government and military.

**WEATHER DATA SOURCES:** ASOS (302) 328-1536.**COMMUNICATIONS:** CTAF 126.0 ATIS 123.95 UNICOM 122.95

DUPONT RCO 122.1R 114.0T (MILLVILLE RADIO)

⑧ PHILADELPHIA APP/DEP CON 118.35 CLNC DEL 119.95 TF 800-354-9884

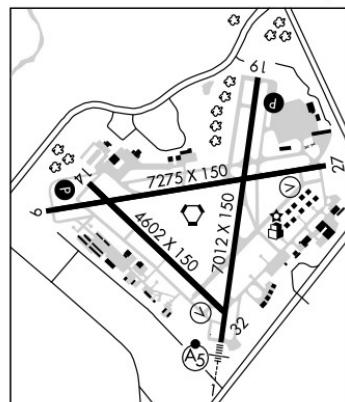
WILMINGTON TOWER 126.0 (1130-0400Z‡) GND CON 121.7

**AIRSPACE:** CLASS D svc 1130-0400Z‡ other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE ILG.

DUPONT (L) VORTAC 114.0 DQO Chan 87 N39°40.69' W75°36.42' at fld. 70/10W.

HADIN NDB (LOM) 248 IL N39°34.87' W75°36.83' 013° 5.9 NM to fld.

ILS 110.3 I-LG Rwy 01. Class IA. LOM HADIN NDB. ILS unmonitored when twr clsd.

**WYOMING****JENKINS**

(15N) 1 W UTC-5(-4DT) N39°07.04' W75°35.07'

53 B S4 NOTAM FILE MIV

RWY 18-36: 2842X70 (TURF) LIRL

RWY 18: TRCV (TRIL). Trees.

RWY 36: TRCV (TRIL). Thld dsplcd 225'. Road.

RWY 12-30: 2035X70 (TURF)

RWY 30: Road.

**AIRPORT REMARKS:** Attended continuously. Rwy 18 TRCV calibration unconfirmed. Rwy 36 TRCV calibration unconfirmed. ACTIVATE LIRL Rwy 18-36 and rotating bcn—122.7.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

PHILADELPHIA APP CON 128.4 317.55

TRENTON MERCER ATIS 126.775

NEW CASTLE ATIS 123.95

NORTHEAST PHILADELPHIA ATIS 121.15

PHILADELPHIA INTL ARR ATIS 133.4

**JOHNSTOWN**  
113.0 JST   
Chan 77  
N40°19.00' W78°50.05'  
L-29, H-10-12

**PHILIPSBURG**  
115.5 PSB   
Chan 102  
N40°54.98' W77°59.56'  
L-30, H-10-12

**EAST TEXAS**  
110.2 ETX   
Chan 39

**FL180** 096° (22) **MIROY**  
N40°18.93' W78°21.45'

**COFAX**  
N40°18.78' W77°58.02'

Expect clearance to cross at FL 250.

4000' (58)

142°

R-321

(18)

40

(22)

R-005

(22)

62

(22)

R-281

(19)

J152

(19)

V210

3000' (27)

117°

R-296

(70)

V210

2800' (16)

104°

(16)

R-211

(9)

210K (25)

R-349

(9)

Expect clearance to cross at 8000'.

NORTHEAST PHILADELPHIA

PHILADELPHIA INTL

NEW CASTLE

TRAGG

N40°05.75' W75°56.35'

CHESTER COUNTY G.O. CARLSON

MODENA

113.2 MXE   
Chan 79

BOUHN

N40°10.15' W76°29.93'

LINDEN

114.3 LDN   
Chan 90

ST THOMAS

115.0 THS   
Chan 97

NOTE: This STAR is for aircraft capable of 250K IAS or greater.

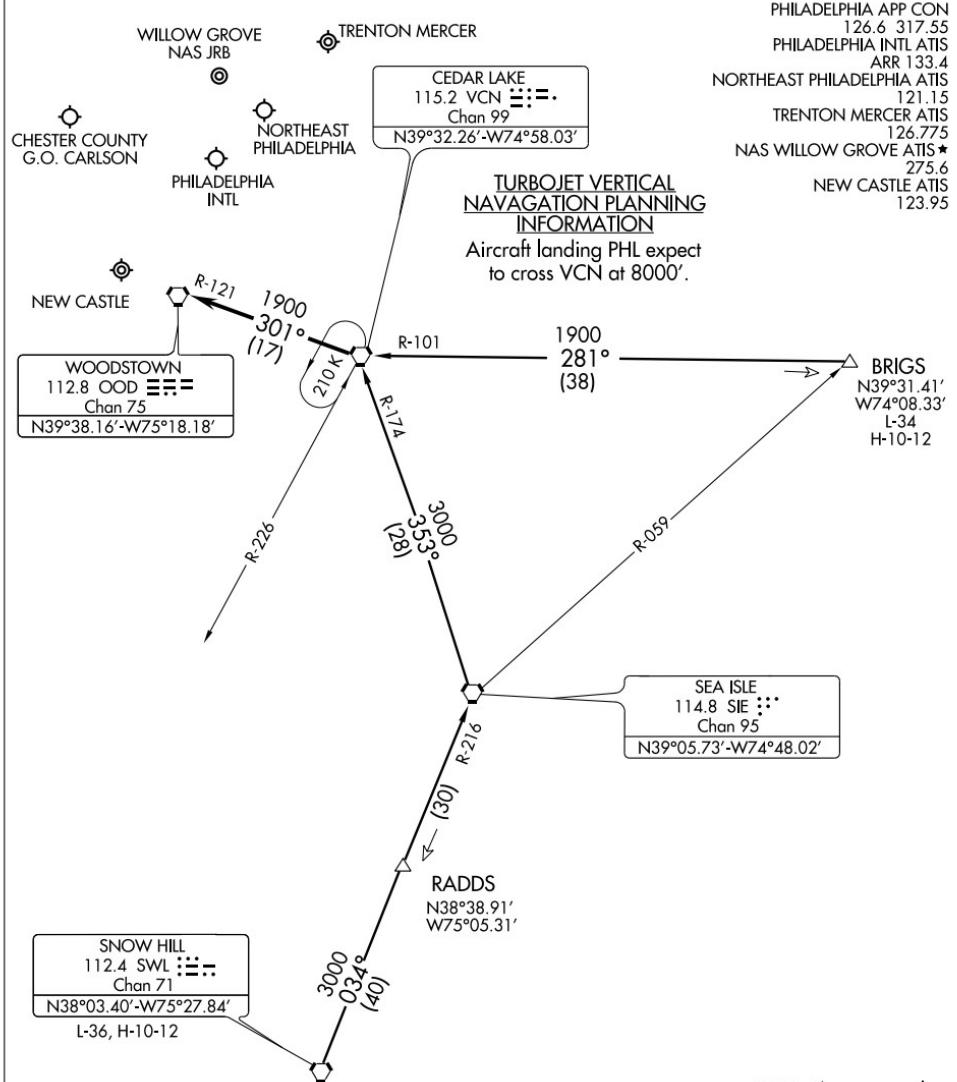
NOTE: Chart not to scale.

#### JOHNSTOWN TRANSITION (JST.BUNTS1):

#### PHILIPSBURG TRANSITION (PSB.BUNTS1):

From over HAR VORTAC via HAR R-117 (V210) and LRP R-296 to LRP VORTAC, thence via LRP R-104 (V210) to BUNTS INT. Expect radar vectors to final approach course.

## CEDAR LAKE EIGHT ARRIVAL



NOTE: Chart not to scale.

**BRIGS TRANSITION (BRIGS.VCN8):** From over BRIGS INT via VCN R-101 to VCN VORTAC. Thence. . . .

**SNOW HILL TRANSITION (SWL\_VCN8):** From over SWL VORTAC via SWL R-034 and SIE R-216 to SIE VORTAC, then via the SIE R-353 and VCN R-174 to VCN VORTAC. Thence. . .

...From over VCN VORTAC:

Turbojets expect radar vectors to final approach course.

Non-Turbojets continue via the VCN R-301 and the OOD

R-121 to OOD VORTAC; expect radar vectors to final approach course.

## CEDAR LAKE EIGHT ARRIVAL



## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
<b>NEWPORT NEWS, VA</b>			
<b>NEWPORT NEWS/WILLIAMSBURG</b>			
NTL (PHF)	20	07-25	5,200 feet
	25	02-20	6,550 feet
<b>NORFOLK, VA</b>			
<b>NORFOLK INTL (ORF)</b>			
	14	05-23	2,850 feet
	23	14-32	6,300 feet
<b>WILMINGTON, DE</b>			
<b>NEW CASTLE (ILG)</b>			
	01	09-27	4,050 feet
	14	01-19	4,450 feet
	19	14-32	5,750 feet
	32	09-27	3,600 feet

WAAS CH 65815 W01A	APP CRS 015°	Rwy Idg 7012 TDZE 76 Apt Elev 80
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# RNAV (GPS) RWY 1

WILMINGTON / NEW CASTLE (ILG)

WAAS CH 49015 W09A	APP CRS 088°	Rwy Idg 7275 TDZE 80 Apt Elev 80
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# RNAV (GPS) RWY 9

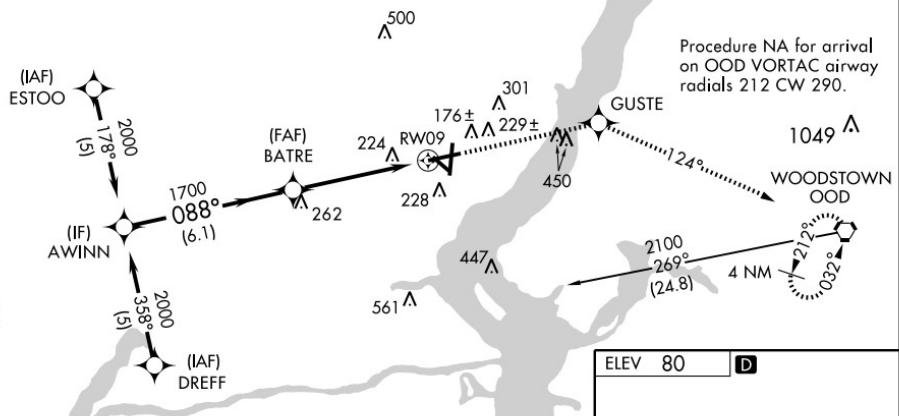
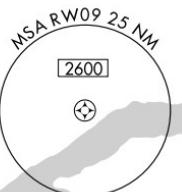
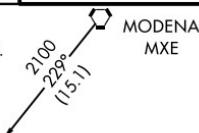
WILMINGTON / NEW CASTLE (ILG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F), DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP and Baro-VNAV NA when using Philadelphia Intl altimeter setting. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 448, LNAV/VNAV DA to 568 and all MDA 60 ft; increase LPV all Cat's visibility 1/4 mile and LNAV/VNAV all Cat's visibility 1/2 mile.

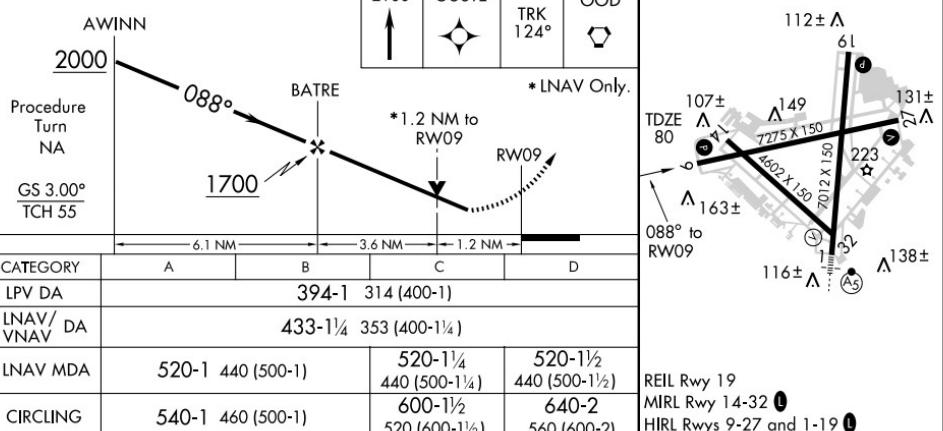
MISSED APPROACH: Climb to 2100 direct GUSTE and via track 124° to OOD VORTAC and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER *126.0 0 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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Procedure NA for arrival on MXE VORTAC airway radials 177 CW 283.



ELEV 80	D
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**RNAV (GPS) RWY 19**  
WILMINGTON / NEW CASTLE (ILG)

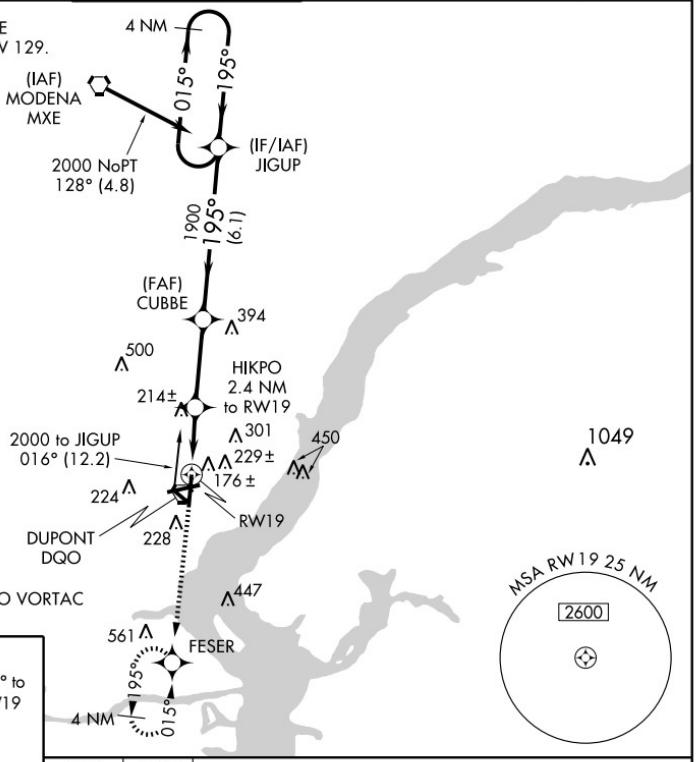
WAAS CH <b>82115</b> <b>W19A</b>	APP CRS <b>195°</b>	Rwy Idg <b>7012</b> TDZE <b>71</b> Apt Elev <b>80</b>
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Baro-VNAV NA when using Philadelphia Int'l altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Int'l altimeter setting; increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDA 60 ft; increase LPV all Cat and LNAV Cat. D visibility  $\frac{1}{2}$  mile.

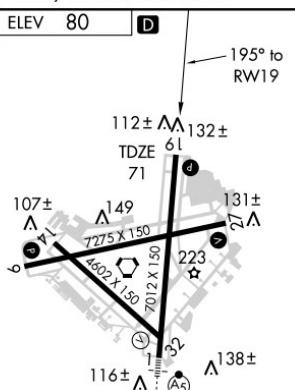
**MISSSED APPROACH:**  
Climb to 2000 direct  
FESEER and hold.

<b>ATIS 123.95</b>	<b>PHILADELPHIA APP CON 118.35 323.1</b>	<b>WILMINGTON TOWER★ 126.00 (CTAF) 305.4</b>	<b>GND CON 121.7 275.8</b>	<b>CINC DEL 119.95</b>	<b>UNICOM 122.95</b>
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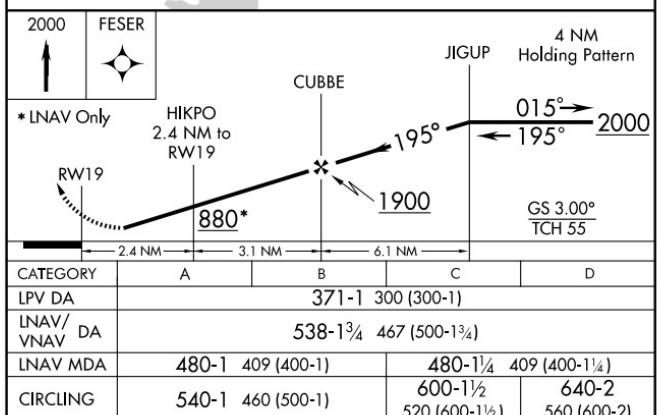
Procedure NA for arrival on MXE  
VORTAC airway radials 056 CW 129.



Procedure NA for arrival on DQO VORTAC airway radials 053 CW 068.



REIL Rwy 19  
MIRL Rwy 14-32 L  
HIRL Rwy 9-27 and 1-19 R





VORTAC DQO  
114.0  
Chan 87

APP CRS  
004°

Rwy Idg 7012  
TDZE 76  
Apt Elev 80

## VOR RWY 1

WILMINGTON / NEW CASTLE (ILG)

Visibility reduction by helicopter NA. When local altimeter setting not received, use Philadelphia Intl. altimeter setting: increase all MDA 60 ft; increase S-1 Cats C/D and Circling Cats B/C/D visibility  $\frac{1}{4}$  mile. Inoperative table does not apply to S-1 Cats A/B and ANOCE Fix minimums S-1 Cats A/B. For inoperative MALSR, when using Philadelphia Intl. altimeter setting, increase S-1 Cat B and ANOCE Fix minimums S-1 Cat C  $\frac{1}{4}$  mile. When using Philadelphia Intl. altimeter setting, inoperative table does not apply to S-1 Cat A and ANOCE Fix minimums S-1 Cats A/B.

MALSR



MISSSED APPROACH: Climbing left turn to 2000 via DQO VORTAC R-274 to GLEEM Int/ DQO 5.1 DME and hold, continue climb-in-hold to 2000.

ATIS  
123.95

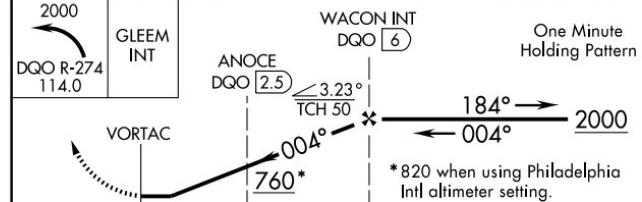
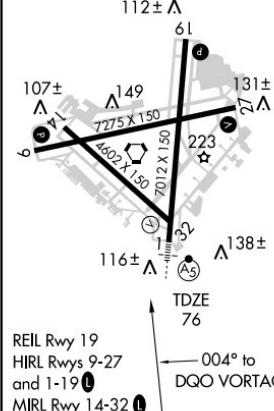
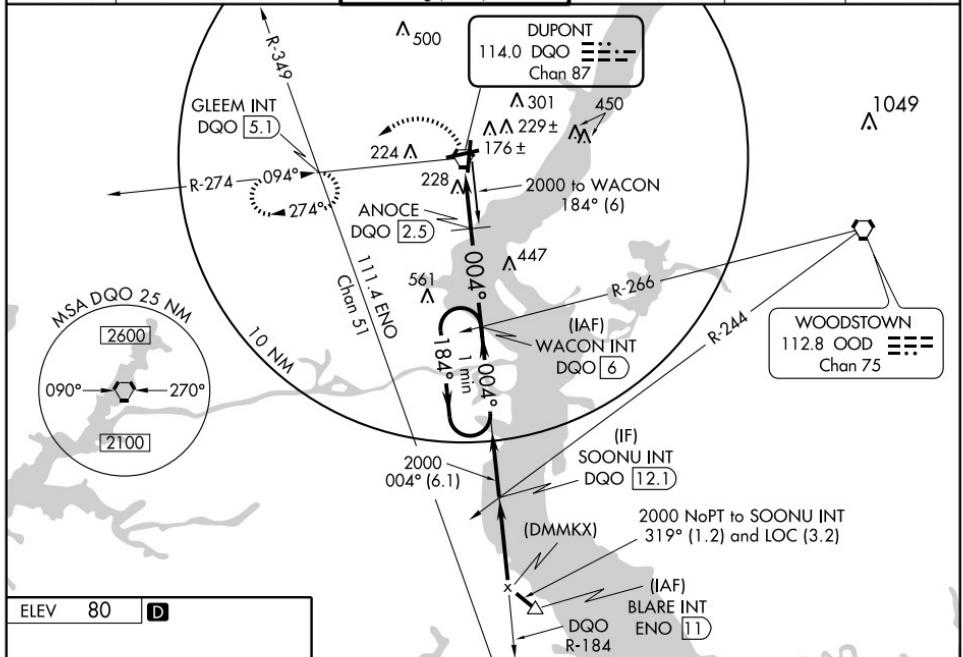
PHILADELPHIA APP CON  
118.35 323.1

WILMINGTON TOWER\*  
126.0 0 (CTAF) 305.4

GND CON  
121.7 275.8

CLNC DEL  
119.95

UNICOM  
122.95



CATEGORY	A	B	C	D
S-1	760/50 684 (700-1)		760-1½ 684 (700-1½)	760-1¾ 684 (700-1¾)
CIRCLING	760-1 680 (700-1)		760-2 680 (700-2)	760-2¼ 680 (700-2¼)

## ANOCE FIX MINIMUMS

S-1	480/50 404 (400-1)		
CIRCLING	540-1 460 (500-1)	600-1½ 520 (600-1½)	640-2 560 (600-2)

VOR RWY 9

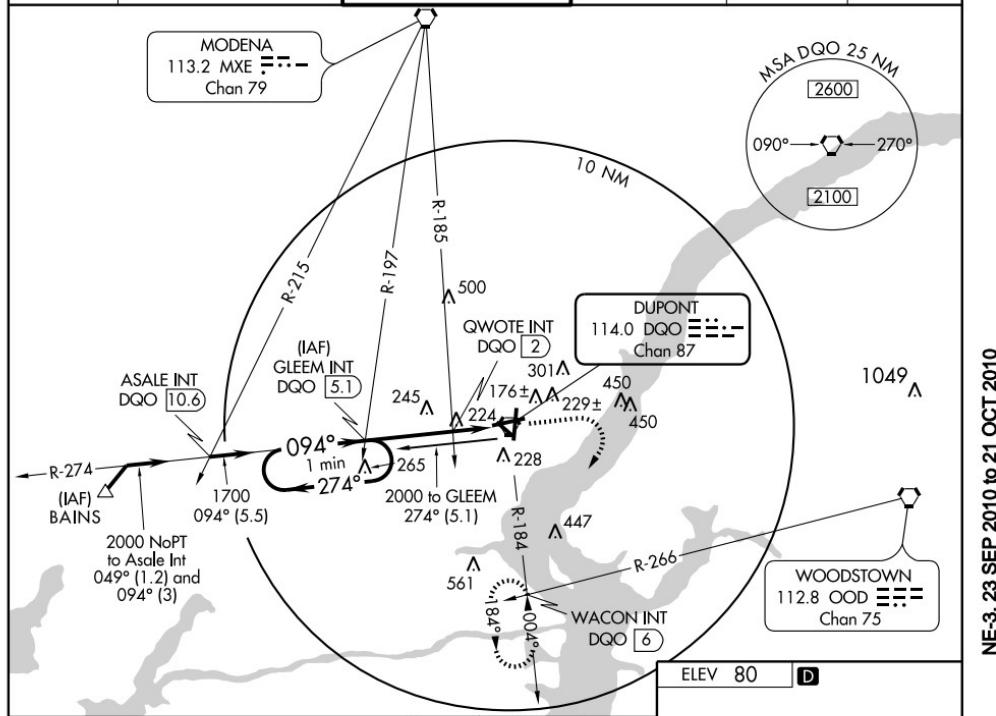
## WILMINGTON / NEW CASTLE (ILG)

VORTAC DQO <b>114.0</b> Chan 87	APP CRS <b>094°</b>	Rwy Idg <b>7275</b> TDZE <b>80</b> Apt Elev <b>80</b>
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Inoperative table does not apply to ODALS.

**MISSED APPROACH:** Climb to 500, then climbing right turn to 2000 via DQQ R-184 to WACON Int/DQQ 6 DME and hold.

ATIS <b>123.95</b>	PHILADELPHIA APP CON <b>118.35 323.1</b>	WILMINGTON TOWER ★ <b>126.0 0 (CTAF) 305.4</b>	GND CON <b>121.7 275.8</b>	CINC DEL <b>119.95</b>	UNICOM <b>122.95</b>
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One Minute Holding Pattern GLEEM INT DQO 5.1 WACON INT

2000 ← 274°  
094° ← x 1700 094° ← QWOTE INT  
DQO [2] VORTAC

FIFV 80 D

CATEGORY	3.1 NM		1.4 NM	0.6
	A	B	C	D
S-9	620-1	540 (600-1)	620-1½ 540 (600-1½)	620-1¾ 540 (600-1¾)

REIL Rwy 19  
HIRL Rwy 9-27 and 1-19 L  
MIRL Rwy 14-32 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

VORTAC DQO  
114.0  
Chan 87

APP CRS  
261°

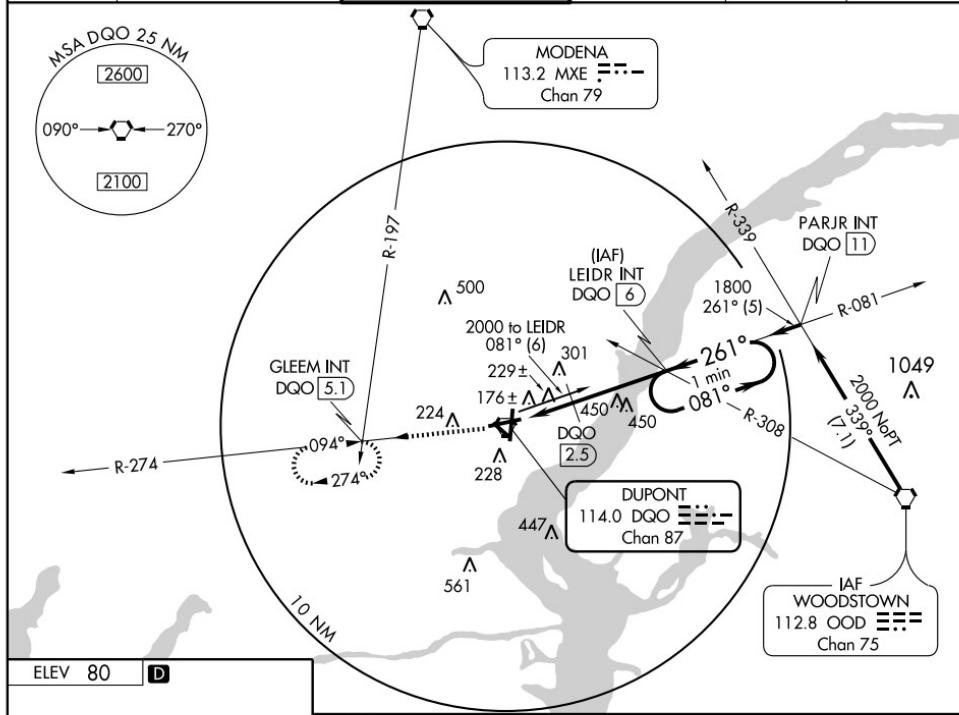
Rwy Idg 7275  
TDZE 72  
Apt Elev 80

## VOR RWY 27

WILMINGTON / NEW CASTLE (ILG)

MISSED APPROACH: Climb to 2000 via DQO VORTAC  
R-274 to GLEEM Int/DQO 5.1 DME and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER *	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
126.0 (CTAF) 305.4					



ELEV 80	D	2000		LEIDR INT DQO 6		One Minute Holding Pattern	
112± A	261° to DQO VORTAC	2000	GLEEM INT	261°	081°	2000	
107± A	61	DQO R-274	114.0	1800	261°	2000	
116± A	149	VORTAC		800	261°	1800	
112± A	131± A			800	261°	1800	
112± A	223			800	261°	1800	
112± A	138± A			800	261°	1800	
CATEGORY			A	B	C	D	
S-27			800-1	728 (800-1)	800-2	800-2 1/4	
CIRCLING			800-1	720 (800-1)	800-2	800-2 1/4	
DME MINIMA							
S-27		560-1	488 (500-1)	560-1 1/4	488 (500-1 1/4)	560-1 1/2	
CIRCLING		560-1	480 (500-1)	600-1 1/2	520 (600-1 1/2)	640-2	